# driving behavior random forest v1

# August 31, 2022

```
[]: import numpy as np
    import pandas as pd
    import seaborn as sns
    import matplotlib.pyplot as plt
[]: df_training = pd.read_csv("data_mod/train_motion_data.csv")
    df_test = pd.read_csv("data_mod/test_motion_data.csv")
    df_training
[]:
                               Class DiffAccX DiffAccY
              AccX
                        AccY
          0.000000 0.000000 NORMAL 0.000000 0.000000
         -1.624864 -1.082492 NORMAL -1.624864 -1.082492
    1
         -0.594660 -0.122410 NORMAL 1.030204 0.960082
    3
          0.738478 -0.228456 NORMAL 1.333138 -0.106046
          0.101741 0.777568 NORMAL -0.636737 1.006023
    3411 0.915688 -2.017489
                                SLOW 2.374675 -1.824629
    3412 -1.934203 0.914925
                                SLOW -2.849891 2.932414
    3413 -0.222845 0.747304
                                SLOW 1.711359 -0.167621
    3414 -0.349423
                    0.067261
                                SLOW -0.126579 -0.680043
    3415 -0.402428 0.406218
                                SLOW -0.053005 0.338957
    [3416 rows x 5 columns]
[]: df_training.isna().sum()
[]: AccX
                0
    AccY
                0
    Class
                0
    DiffAccX
                0
    DiffAccY
    dtype: int64
```

## 0.0.1 Change categories to numbers

[]: df training = df training.replace(

```
{"Class": {"NORMAL": 0, "AGGRESSIVE": 1, "SLOW": 2}})
    df test = df test.replace(
        {"Class": {"NORMAL": 0, "AGGRESSIVE": 1, "SLOW": 2}})
    df_training
[]:
              AccX
                        AccY Class DiffAccX DiffAccY
          0.000000 0.000000
                                  0 0.000000 0.000000
    0
         -1.624864 -1.082492
                                  0 -1.624864 -1.082492
    1
    2
         -0.594660 -0.122410
                                  0 1.030204 0.960082
    3
          0.738478 -0.228456
                                  0 1.333138 -0.106046
          0.101741 0.777568
                                  0 -0.636737 1.006023
    3411 0.915688 -2.017489
                                  2 2.374675 -1.824629
    3412 -1.934203 0.914925
                                  2 -2.849891 2.932414
    3413 -0.222845 0.747304
                                  2 1.711359 -0.167621
    3414 -0.349423 0.067261
                                  2 -0.126579 -0.680043
    3415 -0.402428 0.406218
                                  2 -0.053005 0.338957
```

[3416 rows x 5 columns]

#### 0.0.2 Normalize data

```
[]: X_train = df_training.drop(columns=["Class"])
X_train = (X_train - X_train.mean()) / X_train.std() * 100

X_train["Class"] = df_training["Class"]
X_train
```

```
[]:
                AccX
                            AccY
                                    DiffAccX
                                                DiffAccY Class
                        8.424269
                                                              0
    0
           -2.090819
                                    0.012037
                                               -0.012577
    1
         -195.187234 -134.475048 -166.006943 -114.501443
                                                              0
    2
          -72.759319
                       -7.735009
                                  105.272186
                                             101.529709
                                                              0
           85.668834
    3
                      -21.734057
                                  136.224200
                                              -11.228412
                                                              0
    4
            9.999939
                      111.070663
                                  -65.045995
                                             106.388643
                                                              0
    3411 106.728131 -257.903714
                                  242.642233 -192.992960
                                                              2
                                                              2
    3412 -231.948681
                      129.203106 -291.172960 310.131807
    3413 -28.573341 107.075511
                                  174.868553
                                             -17.740887
                                                              2
    3414 -43.615750
                       17.303333 -12.921013 -71.936747
                                                              2
    3415 -49.914742
                       62.048954
                                  -5.403663
                                              35.836967
                                                              2
```

[3416 rows x 5 columns]

```
[]: X_testing = df_test.drop(columns="Class")
X_testing = (X_testing - X_testing.mean()) / X_testing.std() * 100

X_testing["Class"] = df_test["Class"]
X_testing
```

```
[]:
                AccX
                            AccY
                                    DiffAccX
                                                DiffAccY Class
    0
           67.345100
                       -9.509000
                                   -0.021340
                                               -0.012385
                                                              1
    1
           57.982946
                       10.303100
                                   -8.494392
                                               16.758078
                                                              1
    2
          270.452050 -824.010358 192.270076 -706.238535
                                                              1
    3
          229.805029 -828.171460 -36.808209
                                                              1
                                               -3.534656
    4
          283.133326 -732.402479
                                   48.242495
                                               81.053740
                                                              1
    3079 -84.712435 -57.627689 -73.609489
                                               -1.097380
                                                              2
    3080 145.444037
                       51.068429
                                  208.277716
                                               91.996249
                                                              2
                                                              2
    3081 121.268079 -177.287100 -21.901364 -193.309813
    3082
           83.265000
                       79.069807 -34.415357 216.987532
                                                              2
    3083 140.063424
                       35.612446
                                  51.383072 -36.797989
                                                              2
```

[3084 rows x 5 columns]

# 0.0.3 Change data to percentiles

```
[]: """X_n_quantile = pd.DataFrame(columns=df_training.columns)

quantiles = [0.05, 0.25, 0.5, 0.75, 0.90]
columns = ["AccX", "AccY", "DiffAccX", "DiffAccY", "Class"]

for column in columns:
    data_quantiles = []
    for quan in quantiles:
        if(quan == "Class"):
            data_quantiles.append(int(X_n[column].quantile(quan)))
        else:
            data_quantiles.append(X_n[column].quantile(quan))

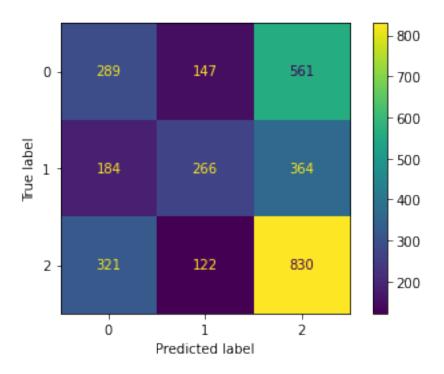
X_n_quantile[column] = data_quantiles

X_n_quantile"""
```

## 0.0.4 Balance data

# 0.1 Train model

```
[]: X_training = X_train.drop(columns="Class")
    y_training = X_train.Class
    X_test = X_testing.drop(columns="Class")
    y_test = X_testing.Class
[]: from sklearn.ensemble import RandomForestClassifier
    from sklearn.model_selection import GridSearchCV, RandomizedSearchCV
    from sklearn.metrics import confusion_matrix, ConfusionMatrixDisplay
[]: rfc = RandomForestClassifier(n_estimators=30, max_depth=15, random_state=5,__
     rfc.fit(X_training, y_training)
[]: RandomForestClassifier(criterion='entropy', max_depth=15, n_estimators=30,
                           random state=5)
[]: rfc.score(X_training, y_training)
[]: 0.860655737704918
[]: rfc.score(X_test, y_test)
[]: 0.4490920881971466
[ ]: y_pred = rfc.predict(X_test)
    CM = confusion_matrix(y_test, y_pred)
    display = ConfusionMatrixDisplay(confusion_matrix=CM,
                           display_labels=rfc.classes_)
    display.plot()
[]: <sklearn.metrics._plot.confusion_matrix.ConfusionMatrixDisplay at
    0x7fad145d19f0>
```



[]: <sklearn.metrics.\_plot.confusion\_matrix.ConfusionMatrixDisplay at 0x7facbaf33e80>

```
0.6
            0.29
                             0.15
                                              0.56
    0 -
                                                                 0.5
Frue label
                                                                - 0.4
            0.23
                             0.33
                                              0.45
                                                                - 0.3
                                                                0.2
            0.25
    2
                             0.096
                                              0.65
              Ó
                               1
                                                2
                       Predicted label
```

```
[]: rfc.score(X_test, y_test)
[]: 0.4490920881971466
[]: rfc_imp = pd.DataFrame(rfc.feature_importances_, columns=['importance'])
[]: rfc_imp['importance'] = rfc_imp['importance'] * 100
     rfc_imp = rfc_imp.set_index(X_training.columns)
     rfc_imp
[]:
               importance
     AccX
                24.927821
     AccY
                25.771760
    DiffAccX
                23.998488
    DiffAccY
                25.301931
[]: rfc_imp.sort_values(by='importance', ascending=False)
[]:
               importance
     AccY
                25.771760
    DiffAccY
                25.301931
     AccX
                24.927821
    DiffAccX
                23.998488
```

#### 0.1.1 Train model with RandomSearchCV

```
[]: n estimators = np.arange(2, 200, 2)
     max_features = ['sqrt', None]
     \max_{depth} = [int(x) \text{ for } x \text{ in } np.linspace(5, 20, num = 20)]
     max_depth.append(None)
     min_samples_split = np.arange(2, 10)
     min_samples_leaf = np.arange(1, 4)
     bootstrap = [True, False]
     random_grid = {'n_estimators': n_estimators,
                     'max features': max features,
                     'max_depth': max_depth,
                     'min_samples_split': min_samples_split,
                     'min_samples_leaf': min_samples_leaf,
                     'bootstrap': bootstrap}
[]: weights = \{0:1.5, 1:1.2, 2:1\}
     random forest = RandomForestClassifier(random state=0, criterion="entropy",
      →min_impurity_decrease=0, class_weight="balanced")
     param_grid = {'n_estimators': np.arange(2, 40, 2), 'max_depth': np.arange(3, ___
      \rightarrow30), 'max_leaf_nodes': np.arange(6, 30, 2), 'min_samples_leaf': np.arange(1, \square
      →4)}
     # best_params: test 47.5% {'max_depth': 7, 'n_estimators': 33}
     # AccY, AccX, GyroZ, GyroX
     # best params 2: test 47% {'n estimators': 96, 'min samples split': 3
      → 'min_samples_leaf': 1, 'max_features': 'sqrt', 'max_depth': 5, 'bootstrap': ⊔
      \rightarrow False?
     random_gscv = RandomizedSearchCV(random_forest, random_grid, n_iter=1000, cv=5,_
     →verbose=10, n_jobs=10, random_state=0)
     random_gscv.fit(X_training, y_training)
```

```
Fitting 5 folds for each of 1000 candidates, totalling 5000 fits [CV 1/5; 1/1000] START bootstrap=False, max_depth=None, max_features=None, min_samples_leaf=3, min_samples_split=7, n_estimators=108 [CV 1/5; 2/1000] START bootstrap=True, max_depth=12, max_features=sqrt, min_samples_leaf=2, min_samples_split=2, n_estimators=16 [CV 2/5; 1/1000] START bootstrap=False, max_depth=None, max_features=None, min_samples_leaf=3, min_samples_split=7, n_estimators=108 [CV 3/5; 1/1000] START bootstrap=False, max_depth=None, max_features=None,
```

```
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 4/5; 1/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 5/5; 1/1000] START bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=7, n estimators=108
[CV 2/5; 2/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=16
[CV 1/5; 2/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=16;, score=0.411 total
time=
      0.1s
[CV 3/5; 2/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=16
[CV 1/5; 3/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 5/5; 2/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=16
[CV 4/5; 2/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=16
[CV 2/5; 2/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=16;, score=0.382 total
[CV 3/5; 2/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=16;, score=0.388 total
time=
      0.1s
[CV 2/5; 3/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 3/5; 3/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 5/5; 2/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=16;, score=0.410 total
time=
      0.1s
[CV 4/5; 2/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=16;, score=0.392 total
time=
      0.1s
[CV 4/5; 3/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 5/5; 3/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 1/5; 3/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80;, score=0.387 total
time=
       2.0s
[CV 1/5; 4/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 3/5; 3/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80;, score=0.327 total
[CV 2/5; 3/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.379 total
```

```
time=
        2.1s
[CV 2/5; 4/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 3/5; 4/1000] START bootstrap=False, max_depth=7, max_features=None,
min samples leaf=2, min samples split=9, n estimators=88
[CV 4/5; 3/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.325 total
time=
       2.0s
[CV 4/5; 4/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 5/5; 3/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.346 total
time=
       2.2s
[CV 5/5; 4/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 4/5; 1/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.344 total
      3.1s
[CV 1/5; 5/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=102
[CV 5/5; 1/1000] END bootstrap=False, max depth=None, max features=None,
min samples leaf=3, min samples split=7, n estimators=108;, score=0.357 total
       3.2s
[CV 1/5; 4/1000] END bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88;, score=0.405 total
time=
      1.1s
[CV 2/5; 5/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=102
[CV 3/5; 5/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=102
[CV 1/5; 1/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.338 total
time=
      3.5s
[CV 3/5; 1/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=7, n estimators=108;, score=0.353 total
time=
       3.3s
[CV 4/5; 5/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=102
[CV 5/5; 5/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=102
[CV 2/5; 1/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.340 total
[CV 1/5; 6/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=108
[CV 2/5; 4/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=88;, score=0.385 total
time=
      1.2s
```

[CV 2/5; 6/1000] START bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108 [CV 3/5; 4/1000] END bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=88;, score=0.344 total time= 1.3s[CV 3/5; 6/1000] START bootstrap=False, max depth=13, max features=sqrt, min samples leaf=1, min samples split=4, n estimators=108 [CV 4/5; 4/1000] END bootstrap=False, max depth=7, max features=None, min samples leaf=2, min samples split=9, n estimators=88;, score=0.367 total time= 1.3s [CV 4/5; 6/1000] START bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108 [CV 5/5; 4/1000] END bootstrap=False, max depth=7, max features=None, min samples leaf=2, min samples split=9, n estimators=88;, score=0.366 total [CV 5/5; 6/1000] START bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108 [CV 2/5; 5/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=102;, score=0.397 total time= 1.3s [CV 1/5; 7/1000] START bootstrap=True, max depth=None, max features=sqrt, min samples leaf=2, min samples split=3, n estimators=18 [CV 3/5; 5/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=102;, score=0.347 total time= 1.3s[CV 2/5; 7/1000] START bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18 [CV 1/5; 5/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=102;, score=0.387 total time= 1.5s [CV 3/5; 7/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18 [CV 1/5; 6/1000] END bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108;, score=0.402 total time= 1.3s [CV 4/5; 7/1000] START bootstrap=True, max depth=None, max features=sqrt, min samples leaf=2, min samples split=3, n estimators=18 [CV 2/5; 7/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18;, score=0.378 total time= 0.2s [CV 5/5; 7/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18 [CV 1/5; 7/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min samples leaf=2, min samples split=3, n estimators=18;, score=0.385 total time= 0.2s [CV 1/5; 8/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=52 [CV 5/5; 5/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt,

min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=102;, score=0.365 total time= 1.4s[CV 2/5; 8/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=52 [CV 3/5; 7/1000] END bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18;, score=0.388 total time= 0.2s[CV 3/5; 8/1000] START bootstrap=True, max depth=None, max features=None, min samples leaf=1, min samples split=4, n estimators=52 [CV 4/5; 5/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=102;, score=0.362 total 1.5s time= [CV 4/5; 8/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=52 [CV 4/5; 7/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min samples leaf=2, min samples split=3, n estimators=18;, score=0.375 total time= 0.2s [CV 5/5; 8/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=52 [CV 5/5; 7/1000] END bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=18;, score=0.385 total time= 0.2s[CV 1/5; 9/1000] START bootstrap=True, max\_depth=11, max\_features=None, min samples leaf=3, min samples split=2, n estimators=36 [CV 2/5; 6/1000] END bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108;, score=0.373 total time= 1.3s [CV 2/5; 9/1000] START bootstrap=True, max depth=11, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=36 [CV 3/5; 6/1000] END bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108;, score=0.357 total 1.3s [CV 4/5; 6/1000] END bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108;, score=0.376 total time= 1.3s[CV 3/5; 9/1000] START bootstrap=True, max depth=11, max features=None, min samples leaf=3, min samples split=2, n estimators=36 [CV 4/5; 9/1000] START bootstrap=True, max\_depth=11, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=36 [CV 5/5; 6/1000] END bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=108;, score=0.379 total 1.4stime= [CV 5/5; 9/1000] START bootstrap=True, max depth=11, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=36 [CV 1/5; 9/1000] END bootstrap=True, max\_depth=11, max\_features=None, min samples leaf=3, min samples split=2, n estimators=36;, score=0.414 total time= 0.4s

[CV 1/5; 10/1000] START bootstrap=False, max\_depth=8, max\_features=None,

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min_samples_leaf=2, min_samples_split=8, n_estimators=36
[CV 2/5; 9/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=2, n estimators=36;, score=0.389 total
time= 0.5s
[CV 2/5; 10/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=36
[CV 4/5; 9/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=36;, score=0.410 total
time=
      0.5s
[CV 3/5; 10/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=36
[CV 3/5; 9/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=2, n estimators=36;, score=0.385 total
time=
       0.5s
[CV 4/5; 10/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=36
[CV 5/5; 9/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=2, n estimators=36;, score=0.389 total
time=
      0.5s
[CV 5/5; 10/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=36
[CV 5/5; 8/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=52;, score=0.378 total
time=
      0.8s
[CV 1/5; 11/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 1/5; 10/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=2, min samples split=8, n estimators=36;, score=0.374 total
[CV 2/5; 11/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 1/5; 8/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=4, n estimators=52;, score=0.377 total
time=
      1.0s
[CV 3/5; 11/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 2/5; 8/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=52;, score=0.384 total
time= 1.0s
[CV 4/5; 11/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 4/5; 8/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=4, n estimators=52;, score=0.350 total
time=
      1.0s
[CV 5/5; 11/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 3/5; 8/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=4, n estimators=52;, score=0.372 total
```

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time=
        1.0s
[CV 1/5; 12/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156
[CV 2/5; 10/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=2, min samples split=8, n estimators=36;, score=0.375 total
time=
       0.6s
[CV 2/5; 12/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156
[CV 4/5; 10/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=36;, score=0.356 total
time= 0.6s
[CV 3/5; 12/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156
[CV 3/5; 10/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=36;, score=0.350 total
time= 0.6s
[CV 4/5; 12/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156
[CV 5/5; 10/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=2, min samples split=8, n estimators=36;, score=0.366 total
time=
      0.6s
[CV 5/5; 12/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156
[CV 2/5; 11/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.407 total
time=
       1.0s
[CV 1/5; 13/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112
[CV 1/5; 11/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.408 total
time=
      1.2s
[CV 2/5; 13/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112
[CV 4/5; 11/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=130;, score=0.388 total
time= 1.2s
[CV 3/5; 13/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112
[CV 3/5; 11/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.372 total
time=
      1.3s
[CV 4/5; 13/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112
[CV 5/5; 11/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.401 total
[CV 5/5; 13/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112
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[CV 1/5; 13/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112;, score=0.404 total
time=
      1.1s
[CV 1/5; 14/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=182
[CV 2/5; 12/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=156;, score=0.375 total
time=
       2.1s
[CV 2/5; 14/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 2/5; 13/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112;, score=0.387 total
time=
      1.4s
[CV 3/5; 14/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 3/5; 13/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112;, score=0.332 total
time= 1.2s
[CV 4/5; 14/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=182
[CV 1/5; 12/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=156;, score=0.408 total
      2.5s
[CV 5/5; 14/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 4/5; 12/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156;, score=0.366 total
time=
       2.3s
[CV 1/5; 15/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16
[CV 4/5; 13/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112;, score=0.375 total
time= 1.4s
[CV 2/5; 15/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=16
[CV 3/5; 12/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=156;, score=0.354 total
time=
       2.4s
[CV 3/5; 15/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16
[CV 5/5; 13/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=112;, score=0.391 total
[CV 4/5; 15/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16
[CV 5/5; 12/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=156;, score=0.379 total
time=
       2.5s
```

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[CV 5/5; 15/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16
[CV 1/5; 15/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16;, score=0.380 total
time= 0.4s
[CV 1/5; 16/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=104
[CV 4/5; 15/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=16;, score=0.332 total
time=
      0.4s
[CV 2/5; 16/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104
[CV 2/5; 15/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=5, n estimators=16;, score=0.387 total
[CV 3/5; 16/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104
[CV 3/5; 15/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=16;, score=0.332 total
time=
      0.4s
[CV 4/5; 16/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=104
[CV 1/5; 14/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.398 total
time= 1.2s
[CV 5/5; 16/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104
[CV 5/5; 15/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=5, n estimators=16;, score=0.360 total
time=
      0.4s
[CV 1/5; 17/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192
[CV 4/5; 14/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.378 total
time=
      1.2s
[CV 2/5; 17/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=3, min samples split=3, n estimators=192
[CV 2/5; 14/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.411 total
time=
      1.4s
[CV 3/5; 17/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192
[CV 3/5; 14/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.369 total
time=
      1.4s
[CV 4/5; 17/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192
[CV 1/5; 16/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
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min_samples_leaf=1, min_samples_split=5, n_estimators=104;, score=0.418 total
time=
      0.8s
[CV 5/5; 17/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192
[CV 2/5; 16/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104;, score=0.416 total
time= 0.8s
[CV 1/5; 18/1000] START bootstrap=True, max_depth=7, max_features=None,
min samples leaf=1, min samples split=6, n estimators=124
[CV 3/5; 16/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104;, score=0.376 total
       0.8s
[CV 4/5; 16/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104;, score=0.394 total
[CV 2/5; 18/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124
[CV 3/5; 18/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124
[CV 5/5; 14/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.395 total
time= 1.4s
[CV 4/5; 18/1000] START bootstrap=True, max_depth=7, max_features=None,
min samples leaf=1, min samples split=6, n estimators=124
[CV 5/5; 16/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=104;, score=0.378 total
time=
      0.8s
[CV 5/5; 18/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124
[CV 3/5; 18/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124;, score=0.401 total
time= 1.0s
[CV 1/5; 19/1000] START bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104
[CV 1/5; 18/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124;, score=0.417 total
time= 1.1s
[CV 2/5; 19/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104
[CV 2/5; 18/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124;, score=0.397 total
      1.1s
time=
[CV 3/5; 19/1000] START bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104
[CV 4/5; 18/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124;, score=0.394 total
time=
      1.1s
[CV 4/5; 19/1000] START bootstrap=False, max depth=15, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=3, n_estimators=104
[CV 5/5; 18/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=124;, score=0.388 total
time= 1.1s
[CV 5/5; 19/1000] START bootstrap=False, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=104
[CV 1/5; 19/1000] END bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104;, score=0.402 total
time=
      1.2s
[CV 1/5; 20/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142
[CV 2/5; 19/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104;, score=0.388 total
time=
      1.1s
[CV 2/5; 20/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142
[CV 3/5; 19/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104;, score=0.351 total
time=
      1.4s
[CV 3/5; 20/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=5, n estimators=142
[CV 1/5; 17/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192;, score=0.398 total
time=
       3.1s
[CV 4/5; 20/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142
[CV 4/5; 19/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104;, score=0.387 total
[CV 5/5; 20/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142
[CV 2/5; 17/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192;, score=0.408 total
time=
       2.8s
[CV 1/5; 21/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=58
[CV 5/5; 19/1000] END bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=104;, score=0.366 total
time= 1.4s
[CV 2/5; 21/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58
[CV 4/5; 17/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192;, score=0.382 total
time=
       2.9s
[CV 3/5; 21/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58
[CV 3/5; 17/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=192;, score=0.379 total
```

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time=
        3.1s
[CV 4/5; 21/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58
[CV 5/5; 17/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=3, min samples split=3, n estimators=192;, score=0.385 total
time=
       3.0s
[CV 5/5; 21/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58
[CV 1/5; 21/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58;, score=0.405 total
time= 0.6s
[CV 1/5; 22/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 2/5; 21/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58;, score=0.387 total
time=
      0.6s
[CV 2/5; 22/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 3/5; 21/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=58;, score=0.398 total
time=
      0.6s
[CV 3/5; 22/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 1/5; 22/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.409 total
time=
       0.3s
[CV 4/5; 22/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 4/5; 21/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58;, score=0.367 total
time=
      0.6s
[CV 5/5; 22/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 2/5; 22/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=48;, score=0.404 total
time= 0.3s
[CV 1/5; 23/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 5/5; 21/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=58;, score=0.395 total
time=
      0.6s
[CV 2/5; 23/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 3/5; 22/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.356 total
[CV 3/5; 23/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
```

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[CV 4/5; 22/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.370 total
time=
      0.3s
[CV 4/5; 23/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=180
[CV 5/5; 22/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=48;, score=0.411 total
time=
      0.3s
[CV 5/5; 23/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 2/5; 20/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142;, score=0.369 total
time=
       2.5s
[CV 1/5; 24/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174
[CV 4/5; 20/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142;, score=0.373 total
       2.5s
[CV 2/5; 24/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=174
[CV 1/5; 20/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=5, n estimators=142;, score=0.385 total
time=
      3.0s
[CV 3/5; 24/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174
[CV 2/5; 23/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.400 total
time=
      1.6s
[CV 4/5; 24/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174
[CV 1/5; 23/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.396 total
time=
      1.6s
[CV 5/5; 24/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=174
[CV 3/5; 23/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=180;, score=0.376 total
time=
      1.7s
[CV 1/5; 25/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184
[CV 4/5; 23/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.373 total
[CV 2/5; 25/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184
[CV 5/5; 23/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.375 total
time=
       1.6s
```

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[CV 3/5; 25/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184
[CV 3/5; 20/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=142;, score=0.357 total
time= 3.1s
[CV 4/5; 25/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=2, min samples split=5, n estimators=184
[CV 5/5; 20/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=142;, score=0.367 total
time=
      3.0s
[CV 5/5; 25/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184
[CV 1/5; 24/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174;, score=0.409 total
[CV 1/5; 26/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 2/5; 24/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174;, score=0.373 total
time=
      1.7s
[CV 2/5; 26/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=166
[CV 3/5; 24/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174;, score=0.363 total
time= 1.8s
[CV 3/5; 26/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 4/5; 24/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174;, score=0.388 total
time=
      1.9s
[CV 4/5; 26/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 5/5; 24/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=174;, score=0.365 total
time=
      1.9s
[CV 5/5; 26/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=166
[CV 1/5; 26/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.396 total
time=
      1.5s
[CV 1/5; 27/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44
[CV 2/5; 26/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.410 total
time=
       1.4s
[CV 2/5; 27/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44
[CV 3/5; 26/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
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min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=166;, score=0.378 total time= 1.5s [CV 3/5; 27/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=44 [CV 1/5; 27/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=44;, score=0.395 total time= 0.7s[CV 4/5; 27/1000] START bootstrap=True, max depth=16, max features=None, min samples leaf=3, min samples split=3, n estimators=44 [CV 4/5; 26/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=166;, score=0.392 total time= [CV 5/5; 27/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=44 [CV 5/5; 26/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=166;, score=0.384 total time= 1.6s [CV 1/5; 28/1000] START bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=190 [CV 2/5; 27/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=44;, score=0.403 total time= 0.7s[CV 2/5; 28/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=190 [CV 3/5; 27/1000] END bootstrap=True, max\_depth=16, max\_features=None, min samples leaf=3, min samples split=3, n estimators=44;, score=0.382 total time= 0.7s [CV 3/5; 28/1000] START bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=190 [CV 4/5; 27/1000] END bootstrap=True, max\_depth=16, max\_features=None, min samples leaf=3, min samples split=3, n estimators=44;, score=0.366 total time= 0.7s[CV 4/5; 28/1000] START bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=190 [CV 5/5; 27/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=44;, score=0.375 total time= 0.7s[CV 5/5; 28/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=190 [CV 4/5; 25/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=184;, score=0.338 total 4.1stime= [CV 1/5; 29/1000] START bootstrap=True, max depth=5, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=114 [CV 3/5; 25/1000] END bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=184;, score=0.329 total time= 4.3s[CV 2/5; 29/1000] START bootstrap=True, max depth=5, max features=None,

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min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 5/5; 25/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184;, score=0.348 total
time= 4.2s
[CV 3/5; 29/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=1, min samples split=9, n estimators=114
[CV 2/5; 25/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184;, score=0.375 total
time=
      4.8s
[CV 4/5; 29/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 1/5; 25/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=184;, score=0.385 total
time=
       4.8s
[CV 5/5; 29/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 1/5; 29/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.427 total
time=
      0.7s
[CV 1/5; 30/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30
[CV 2/5; 29/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.410 total
time=
      0.8s
[CV 2/5; 30/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30
[CV 3/5; 29/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.384 total
[CV 3/5; 30/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30
[CV 1/5; 30/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=2, n estimators=30;, score=0.385 total
time=
      0.4s
[CV 4/5; 30/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30
[CV 4/5; 29/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.387 total
time= 0.8s
[CV 5/5; 30/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30
[CV 5/5; 29/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.394 total
time=
      0.8s
[CV 1/5; 31/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 1/5; 28/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.406 total
```

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time=
        2.4s
[CV 2/5; 30/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=2, n estimators=30;, score=0.403 total
time= 0.5s
[CV 2/5; 31/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=3, min samples split=8, n estimators=172
[CV 3/5; 31/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 3/5; 30/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30;, score=0.376 total
time= 0.5s
[CV 4/5; 31/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 4/5; 30/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=30;, score=0.376 total
time=
      0.4s
[CV 5/5; 31/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 5/5; 30/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=2, n estimators=30;, score=0.394 total
      0.5s
[CV 1/5; 32/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 2/5; 28/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.391 total
time=
       2.7s
[CV 2/5; 32/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 3/5; 28/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.351 total
time=
       2.6s
[CV 3/5; 32/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 4/5; 28/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=190;, score=0.392 total
       2.6s
time=
[CV 4/5; 32/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 5/5; 28/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.373 total
time=
       2.6s
[CV 5/5; 32/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 1/5; 32/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.389 total
[CV 1/5; 33/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=36
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[CV 2/5; 32/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.417 total
time=
      1.4s
[CV 2/5; 33/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36
[CV 5/5; 32/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=148;, score=0.384 total
time=
      1.2s
[CV 3/5; 33/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=36
[CV 4/5; 32/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.389 total
time=
      1.3s
[CV 4/5; 33/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=36
[CV 3/5; 32/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.367 total
time= 1.3s
[CV 5/5; 33/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36
[CV 1/5; 33/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36;, score=0.392 total
time= 0.4s
[CV 1/5; 34/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70
[CV 2/5; 33/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36;, score=0.382 total
time=
      0.4s
[CV 2/5; 34/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70
[CV 3/5; 33/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=36;, score=0.362 total
time=
      0.3s
[CV 3/5; 34/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=2, min samples split=2, n estimators=70
[CV 4/5; 33/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36;, score=0.392 total
time=
      0.4s
[CV 4/5; 34/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70
[CV 5/5; 33/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=36;, score=0.378 total
      0.4s
[CV 5/5; 34/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70
[CV 2/5; 31/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.366 total
time=
       2.4s
```

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[CV 1/5; 35/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=42
[CV 4/5; 31/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.350 total
time=
      2.8s
[CV 2/5; 35/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=7, n estimators=42
[CV 5/5; 31/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=8, n estimators=172;, score=0.365 total
time=
       2.7s
[CV 3/5; 35/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=42
[CV 1/5; 31/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.370 total
[CV 4/5; 35/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=42
[CV 3/5; 31/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.344 total
time=
      3.0s
[CV 5/5; 35/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=7, n estimators=42
[CV 1/5; 35/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=42;, score=0.387 total
time= 0.8s
[CV 1/5; 36/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 1/5; 36/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.405 total
time=
      0.0s
[CV 2/5; 36/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 2/5; 36/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.387 total
time= 0.0s
[CV 3/5; 36/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=2, n estimators=2
[CV 3/5; 36/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.398 total
time=
      0.0s
[CV 4/5; 36/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 4/5; 36/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.367 total
time=
       0.0s
[CV 5/5; 36/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 5/5; 36/1000] END bootstrap=False, max_depth=5, max_features=None,
```

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min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.395 total
time=
      0.0s
[CV 1/5; 37/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=88
[CV 3/5; 34/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70;, score=0.347 total
time= 1.5s
[CV 2/5; 35/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=7, n estimators=42;, score=0.360 total
time=
      1.0s
[CV 2/5; 37/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=88
[CV 3/5; 37/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=88
[CV 4/5; 35/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=7, n estimators=42;, score=0.376 total
time=
      0.9s
[CV 4/5; 37/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=88
[CV 3/5; 35/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=42;, score=0.350 total
time= 1.0s
[CV 5/5; 37/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=2, min samples split=4, n estimators=88
[CV 5/5; 35/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=2, min samples split=7, n estimators=42;, score=0.365 total
time=
      0.9s
[CV 1/5; 38/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4
[CV 1/5; 34/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=2, min samples split=2, n estimators=70;, score=0.380 total
time= 1.9s
[CV 2/5; 38/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4
[CV 1/5; 38/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4;, score=0.370 total
time= 0.1s
[CV 3/5; 38/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4
[CV 2/5; 38/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4;, score=0.366 total
time=
      0.1s
[CV 4/5; 38/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4
[CV 3/5; 38/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4;, score=0.348 total
time=
      0.1s
[CV 5/5; 38/1000] START bootstrap=False, max_depth=9, max_features=None,
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min_samples_leaf=2, min_samples_split=6, n_estimators=4
[CV 4/5; 38/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4;, score=0.348 total
time= 0.1s
[CV 1/5; 39/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=30
[CV 5/5; 34/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=70;, score=0.350 total
time=
      1.8s
[CV 2/5; 39/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=30
[CV 4/5; 34/1000] END bootstrap=False, max depth=17, max features=None,
min samples leaf=2, min samples split=2, n estimators=70;, score=0.356 total
time=
      1.8s
[CV 3/5; 39/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=30
[CV 5/5; 38/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=4;, score=0.359 total
time=
      0.1s
[CV 4/5; 39/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=30
[CV 1/5; 37/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=88;, score=0.412 total
time=
      0.8s
[CV 5/5; 39/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=30
[CV 2/5; 34/1000] END bootstrap=False, max depth=17, max features=None,
min samples leaf=2, min samples split=2, n estimators=70;, score=0.363 total
[CV 1/5; 40/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156
[CV 2/5; 39/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=30;, score=0.417 total
time=
      0.2s
[CV 4/5; 39/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=30;, score=0.391 total
time= 0.2s
[CV 2/5; 40/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156
[CV 3/5; 40/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156
[CV 3/5; 39/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=30;, score=0.408 total
time=
       0.2s
[CV 4/5; 40/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156
[CV 1/5; 39/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=30;, score=0.398 total
```

0.3stime= [CV 5/5; 40/1000] START bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=156 [CV 5/5; 39/1000] END bootstrap=True, max\_depth=12, max\_features=sqrt, min samples leaf=3, min samples split=9, n estimators=30;, score=0.404 total time= 0.2s [CV 1/5; 41/1000] START bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32 [CV 2/5; 37/1000] END bootstrap=True, max depth=9, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=88;, score=0.406 total time= 0.9s[CV 2/5; 41/1000] START bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32 [CV 5/5; 37/1000] END bootstrap=True, max\_depth=9, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=88;, score=0.395 total time= 0.9s [CV 3/5; 41/1000] START bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32 [CV 3/5; 37/1000] END bootstrap=True, max\_depth=9, max\_features=None, min samples leaf=2, min samples split=4, n estimators=88;, score=0.397 total time= 1.0s [CV 4/5; 41/1000] START bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32 [CV 4/5; 37/1000] END bootstrap=True, max\_depth=9, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=88;, score=0.391 total time= 1.0s [CV 5/5; 41/1000] START bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32 [CV 1/5; 41/1000] END bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32;, score=0.382 total time= 0.9s [CV 1/5; 42/1000] START bootstrap=True, max\_depth=18, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=42 [CV 2/5; 41/1000] END bootstrap=False, max\_depth=18, max\_features=None, min samples leaf=1, min samples split=8, n estimators=32;, score=0.367 total time= 0.7s[CV 2/5; 42/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=42 [CV 3/5; 41/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32;, score=0.328 total time= 0.9s [CV 3/5; 42/1000] START bootstrap=True, max\_depth=18, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=42 [CV 4/5; 41/1000] END bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=32;, score=0.329 total [CV 4/5; 42/1000] START bootstrap=True, max\_depth=18, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=42

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[CV 5/5; 41/1000] END bootstrap=False, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=32;, score=0.365 total
time=
      0.9s
[CV 5/5; 42/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=42
[CV 2/5; 42/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=9, n estimators=42;, score=0.404 total
time=
      0.6s
[CV 1/5; 43/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60
[CV 1/5; 42/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=42;, score=0.411 total
time=
      0.7s
[CV 2/5; 43/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60
[CV 3/5; 42/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=42;, score=0.387 total
time= 0.7s
[CV 3/5; 43/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=60
[CV 4/5; 42/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=9, n estimators=42;, score=0.391 total
time= 0.7s
[CV 4/5; 43/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60
[CV 5/5; 42/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=42;, score=0.378 total
time=
      0.7s
[CV 5/5; 43/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60
[CV 1/5; 43/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60;, score=0.418 total
time=
      0.5s
[CV 1/5; 44/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=5, n estimators=48
[CV 3/5; 40/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=156;, score=0.350 total
time=
       2.1s
[CV 2/5; 44/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48
[CV 2/5; 43/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=60;, score=0.398 total
      0.5s
[CV 3/5; 44/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48
[CV 1/5; 40/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.382 total
time=
       2.4s
```

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[CV 4/5; 44/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48
[CV 4/5; 40/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.357 total
time=
      2.4s
[CV 5/5; 44/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=2, min samples split=5, n estimators=48
[CV 2/5; 40/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=156;, score=0.372 total
time=
       2.4s
[CV 1/5; 45/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140
[CV 4/5; 43/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=60;, score=0.398 total
[CV 2/5; 45/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140
[CV 3/5; 43/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=60;, score=0.372 total
time=
      0.5s
[CV 5/5; 40/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=156;, score=0.369 total
       2.4s
[CV 3/5; 45/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140
[CV 4/5; 45/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140
[CV 5/5; 43/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=60;, score=0.401 total
time=
      0.5s
[CV 5/5; 45/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140
[CV 1/5; 44/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48;, score=0.412 total
time=
      0.5s
[CV 1/5; 46/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=4, n estimators=148
[CV 2/5; 44/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48;, score=0.398 total
time=
      0.6s
[CV 2/5; 46/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 3/5; 44/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=5, n estimators=48;, score=0.375 total
time=
       0.6s
[CV 3/5; 46/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 4/5; 44/1000] END bootstrap=True, max_depth=11, max_features=None,
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min samples leaf=2, min samples split=5, n estimators=48;, score=0.391 total
time=
      0.6s
[CV 4/5; 46/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 5/5; 44/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=48;, score=0.379 total
time= 0.6s
[CV 5/5; 46/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=4, n estimators=148
[CV 2/5; 45/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140;, score=0.420 total
       0.9s
time=
[CV 1/5; 47/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144
[CV 5/5; 45/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140;, score=0.397 total
time=
       0.9s
[CV 2/5; 47/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144
[CV 4/5; 45/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140;, score=0.403 total
time= 1.0s
[CV 3/5; 47/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144
[CV 3/5; 45/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140;, score=0.389 total
time=
      1.0s
[CV 4/5; 47/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144
[CV 1/5; 45/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=140;, score=0.414 total
      1.1s
[CV 5/5; 47/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144
[CV 1/5; 47/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144;, score=0.411 total
time= 1.2s
[CV 1/5; 48/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 2/5; 47/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144;, score=0.397 total
      1.3s
time=
[CV 2/5; 48/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 4/5; 47/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144;, score=0.387 total
time=
      1.2s
[CV 3/5; 48/1000] START bootstrap=True, max depth=6, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 3/5; 47/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144;, score=0.366 total
      1.2s
[CV 4/5; 48/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=84
[CV 5/5; 47/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=144;, score=0.391 total
time=
       1.2s
[CV 5/5; 48/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 2/5; 46/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.369 total
time=
        2.1s
[CV 1/5; 49/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 1/5; 48/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.427 total
time=
      0.4s
[CV 2/5; 49/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 1/5; 46/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.371 total
time=
       2.3s
[CV 3/5; 49/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 3/5; 48/1000] END bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.395 total
[CV 4/5; 49/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 5/5; 48/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.395 total
time=
      0.3s
[CV 2/5; 48/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=84;, score=0.403 total
time= 0.4s
[CV 5/5; 49/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 3/5; 46/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.353 total
       2.3s
time=
[CV 1/5; 50/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130
[CV 2/5; 50/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130
[CV 4/5; 48/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.394 total
```

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0.4s
time=
[CV 3/5; 50/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130
[CV 4/5; 46/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=4, n estimators=148;, score=0.351 total
time=
        2.2s
[CV 4/5; 50/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130
[CV 5/5; 46/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.366 total
time=
       2.3s
[CV 5/5; 50/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130
[CV 5/5; 49/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.357 total
time=
      1.2s
[CV 1/5; 51/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68
[CV 1/5; 49/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.389 total
time=
      1.5s
[CV 2/5; 51/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68
[CV 4/5; 49/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.331 total
time=
       1.3s
[CV 3/5; 51/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68
[CV 2/5; 49/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.391 total
time=
      1.5s
[CV 4/5; 51/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68
[CV 3/5; 49/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.327 total
time= 1.6s
[CV 5/5; 51/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68
[CV 2/5; 50/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130;, score=0.397 total
time=
      1.5s
[CV 1/5; 52/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140
[CV 3/5; 50/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130;, score=0.375 total
[CV 2/5; 52/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140
```

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[CV 4/5; 50/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130;, score=0.397 total
time=
      1.5s
[CV 3/5; 52/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=140
[CV 1/5; 50/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=130;, score=0.405 total
time=
      1.6s
[CV 4/5; 52/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140
[CV 1/5; 51/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=68;, score=0.402 total
time=
      0.5s
[CV 5/5; 52/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140
[CV 5/5; 50/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=130;, score=0.375 total
time= 1.5s
[CV 1/5; 53/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=190
[CV 3/5; 51/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=68;, score=0.395 total
time= 0.5s
[CV 2/5; 53/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=190
[CV 4/5; 51/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=68;, score=0.411 total
time=
      0.5s
[CV 3/5; 53/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=190
[CV 2/5; 51/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=68;, score=0.423 total
time=
      0.6s
[CV 4/5; 53/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=190
[CV 5/5; 51/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=68;, score=0.389 total
time=
      0.6s
[CV 5/5; 53/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=190
[CV 4/5; 52/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140;, score=0.367 total
[CV 1/5; 54/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84
[CV 1/5; 52/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140;, score=0.404 total
time=
       1.5s
```

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[CV 2/5; 54/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84
[CV 3/5; 52/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140;, score=0.398 total
time= 1.4s
[CV 3/5; 54/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=2, min samples split=6, n estimators=84
[CV 2/5; 52/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=140;, score=0.387 total
time=
      1.5s
[CV 4/5; 54/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84
[CV 5/5; 52/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=140;, score=0.395 total
[CV 5/5; 54/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84
[CV 1/5; 54/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84;, score=0.383 total
time=
      1.2s
[CV 1/5; 55/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=160
[CV 3/5; 53/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=190;, score=0.354 total
time=
       2.5s
[CV 2/5; 55/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160
[CV 2/5; 54/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=2, min samples split=6, n estimators=84;, score=0.395 total
time=
      1.4s
[CV 3/5; 55/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160
[CV 4/5; 54/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84;, score=0.360 total
time=
      1.4s
[CV 4/5; 55/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=160
[CV 3/5; 54/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=84;, score=0.379 total
time=
      1.5s
[CV 5/5; 55/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160
[CV 5/5; 54/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=2, min samples split=6, n estimators=84;, score=0.372 total
time=
       1.5s
[CV 1/5; 56/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=10
[CV 2/5; 53/1000] END bootstrap=False, max depth=20, max features=sqrt,
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min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=190;, score=0.387 total time= 3.0s [CV 2/5; 56/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=10 [CV 4/5; 53/1000] END bootstrap=False, max depth=20, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=190;, score=0.354 total time= 3.0s[CV 3/5; 56/1000] START bootstrap=False, max depth=12, max features=None, min samples leaf=2, min samples split=8, n estimators=10 [CV 1/5; 53/1000] END bootstrap=False, max\_depth=20, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=190;, score=0.382 total time= 3.1s[CV 4/5; 56/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=10 [CV 1/5; 56/1000] END bootstrap=False, max depth=12, max features=None, min samples leaf=2, min samples split=8, n estimators=10;, score=0.379 total time= 0.2s [CV 5/5; 56/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=10 [CV 5/5; 53/1000] END bootstrap=False, max depth=20, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=190;, score=0.367 total time= 3.0s [CV 1/5; 57/1000] START bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=184 [CV 2/5; 56/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=2, min samples split=8, n estimators=10;, score=0.375 total time= 0.2s [CV 2/5; 57/1000] START bootstrap=False, max depth=10, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=184 [CV 3/5; 56/1000] END bootstrap=False, max depth=12, max features=None, min samples leaf=2, min samples split=8, n estimators=10;, score=0.357 total 0.2s [CV 3/5; 57/1000] START bootstrap=False, max depth=10, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=184 [CV 4/5; 56/1000] END bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=10;, score=0.375 total time= 0.2s[CV 4/5; 57/1000] START bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=184 [CV 5/5; 56/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=10;, score=0.363 total 0.2s time= [CV 5/5; 57/1000] START bootstrap=False, max depth=10, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=184 [CV 1/5; 55/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=160;, score=0.396 total time= 1.2s [CV 1/5; 58/1000] START bootstrap=True, max\_depth=14, max\_features=None,

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min_samples_leaf=3, min_samples_split=9, n_estimators=74
[CV 2/5; 55/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.400 total
      1.2s
[CV 2/5; 58/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=9, n estimators=74
[CV 5/5; 55/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.389 total
time=
      1.3s
[CV 3/5; 58/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=74
[CV 4/5; 55/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.379 total
time=
      1.5s
[CV 4/5; 58/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=74
[CV 3/5; 55/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.372 total
time=
      1.5s
[CV 5/5; 58/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=9, n estimators=74
[CV 2/5; 58/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=74;, score=0.395 total
time=
      0.9s
[CV 1/5; 59/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 1/5; 58/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=9, n estimators=74;, score=0.404 total
[CV 2/5; 59/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 3/5; 58/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=9, n estimators=74;, score=0.373 total
time=
      0.9s
[CV 3/5; 59/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 1/5; 57/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=184;, score=0.421 total
time= 1.9s
[CV 4/5; 59/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 2/5; 57/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=184;, score=0.394 total
time=
       1.9s
[CV 5/5; 59/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 3/5; 57/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=184;, score=0.365 total
```

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time=
        1.9s
[CV 1/5; 60/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8
[CV 4/5; 58/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=9, n estimators=74;, score=0.398 total
time=
        1.1s
[CV 2/5; 60/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8
[CV 5/5; 58/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=74;, score=0.392 total
time=
      1.1s
[CV 3/5; 60/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8
[CV 4/5; 57/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=184;, score=0.385 total
time=
      1.8s
[CV 4/5; 60/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8
[CV 5/5; 57/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=184;, score=0.372 total
time=
      1.8s
[CV 5/5; 60/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8
[CV 1/5; 60/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8;, score=0.408 total
time=
       0.1s
[CV 1/5; 61/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184
[CV 2/5; 60/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8;, score=0.397 total
time=
      0.1s
[CV 2/5; 61/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184
[CV 4/5; 60/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=8;, score=0.378 total
time= 0.1s
[CV 3/5; 61/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184
[CV 3/5; 60/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8;, score=0.416 total
time=
      0.1s
[CV 4/5; 61/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184
[CV 5/5; 60/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=8;, score=0.379 total
[CV 5/5; 61/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184
```

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[CV 1/5; 59/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.390 total
time=
      1.2s
[CV 1/5; 62/1000] START bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=9, n estimators=54
[CV 2/5; 59/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=134;, score=0.384 total
time=
      1.2s
[CV 2/5; 62/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54
[CV 4/5; 59/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.362 total
time=
      1.3s
[CV 3/5; 62/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54
[CV 5/5; 59/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.394 total
time= 1.3s
[CV 4/5; 62/1000] START bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=9, n estimators=54
[CV 3/5; 59/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=134;, score=0.382 total
time=
      1.5s
[CV 5/5; 62/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54
[CV 1/5; 62/1000] END bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=9, n estimators=54;, score=0.404 total
time=
      0.7s
[CV 1/5; 63/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 2/5; 62/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54;, score=0.387 total
time=
      0.7s
[CV 2/5; 63/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=164
[CV 3/5; 62/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=9, n estimators=54;, score=0.332 total
time=
      0.6s
[CV 3/5; 63/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 4/5; 62/1000] END bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=9, n estimators=54;, score=0.375 total
      0.7s
[CV 4/5; 63/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 5/5; 62/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54;, score=0.391 total
time=
       0.7s
```

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[CV 5/5; 63/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 3/5; 61/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184;, score=0.398 total
time= 2.1s
[CV 1/5; 64/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=94
[CV 5/5; 61/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=2, min samples split=7, n estimators=184;, score=0.381 total
time=
       2.1s
[CV 2/5; 64/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 1/5; 61/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184;, score=0.404 total
[CV 3/5; 64/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 4/5; 61/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184;, score=0.411 total
time=
       2.5s
[CV 4/5; 64/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=94
[CV 2/5; 61/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=184;, score=0.407 total
time=
       2.5s
[CV 5/5; 64/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 1/5; 64/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.431 total
time=
      0.4s
[CV 1/5; 65/1000] START bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 2/5; 64/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=94;, score=0.407 total
time=
      0.5s
[CV 2/5; 65/1000] START bootstrap=False, max depth=14, max features=None,
min samples leaf=1, min samples split=7, n estimators=66
[CV 1/5; 63/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.385 total
time=
      1.6s
[CV 3/5; 65/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 2/5; 63/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.413 total
time=
       1.5s
[CV 4/5; 65/1000] START bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 3/5; 64/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
```

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min samples leaf=3, min samples split=3, n estimators=94;, score=0.391 total
time=
      0.6s
[CV 5/5; 65/1000] START bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 4/5; 64/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=94;, score=0.387 total
time= 0.6s
[CV 1/5; 66/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=138
[CV 5/5; 64/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.398 total
       0.6s
time=
[CV 2/5; 66/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 3/5; 63/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.375 total
time=
      1.6s
[CV 3/5; 66/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 4/5; 63/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.391 total
time= 1.5s
[CV 4/5; 66/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 5/5; 63/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.379 total
time=
      1.6s
[CV 5/5; 66/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 1/5; 65/1000] END bootstrap=False, max depth=14, max features=None,
min samples leaf=1, min samples split=7, n estimators=66;, score=0.379 total
      1.3s
[CV 1/5; 67/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 4/5; 65/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66;, score=0.340 total
time= 1.3s
[CV 2/5; 67/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 2/5; 65/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66;, score=0.370 total
      1.6s
time=
[CV 3/5; 67/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 3/5; 65/1000] END bootstrap=False, max depth=14, max features=None,
min samples leaf=1, min samples split=7, n estimators=66;, score=0.340 total
time=
      1.6s
[CV 4/5; 67/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 1/5; 67/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.405 total
time= 0.7s
[CV 5/5; 65/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=66;, score=0.363 total
[CV 5/5; 67/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98
[CV 1/5; 68/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146
[CV 2/5; 67/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.400 total
time=
       0.8s
[CV 2/5; 68/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146
[CV 2/5; 66/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.403 total
time=
      2.1s
[CV 3/5; 68/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=3, min samples split=3, n estimators=146
[CV 3/5; 67/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98;, score=0.363 total
time=
      0.9s
[CV 4/5; 68/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146
[CV 4/5; 67/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.379 total
[CV 5/5; 68/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146
[CV 1/5; 66/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.387 total
time=
       2.2s
[CV 1/5; 69/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114
[CV 5/5; 67/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98;, score=0.369 total
time= 0.7s
[CV 2/5; 69/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114
[CV 4/5; 66/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.375 total
time=
       2.1s
[CV 3/5; 69/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114
[CV 3/5; 66/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.357 total
```

```
time=
        2.1s
[CV 4/5; 69/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114
[CV 5/5; 66/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=138;, score=0.367 total
time=
        2.1s
[CV 5/5; 69/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114
[CV 1/5; 69/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114;, score=0.412 total
time= 0.8s
[CV 1/5; 70/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 2/5; 69/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114;, score=0.419 total
time=
      0.8s
[CV 2/5; 70/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 3/5; 69/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=4, n estimators=114;, score=0.394 total
time= 0.9s
[CV 4/5; 69/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114;, score=0.388 total
time=
      0.9s
[CV 3/5; 70/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 4/5; 70/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 5/5; 69/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=114;, score=0.392 total
time=
      0.9s
[CV 5/5; 70/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 1/5; 68/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=3, min samples split=3, n estimators=146;, score=0.399 total
       2.3s
time=
[CV 1/5; 71/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134
[CV 2/5; 68/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146;, score=0.401 total
time=
       2.2s
[CV 2/5; 71/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134
[CV 2/5; 70/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.379 total
[CV 3/5; 71/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134
```

```
[CV 1/5; 70/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.401 total
time=
      1.2s
[CV 4/5; 71/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=134
[CV 4/5; 68/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=3, min samples split=3, n estimators=146;, score=0.378 total
time=
       2.3s
[CV 5/5; 71/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134
[CV 3/5; 68/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146;, score=0.381 total
time=
       2.4s
[CV 1/5; 72/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=154
[CV 5/5; 68/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=146;, score=0.388 total
       2.3s
[CV 2/5; 72/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=154
[CV 4/5; 70/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=86;, score=0.378 total
time=
      1.3s
[CV 3/5; 72/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=154
[CV 3/5; 70/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=86;, score=0.360 total
time=
       1.4s
[CV 4/5; 72/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=154
[CV 5/5; 70/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.372 total
time=
      1.3s
[CV 5/5; 72/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=154
[CV 1/5; 71/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=134;, score=0.399 total
time=
      1.0s
[CV 1/5; 73/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 1/5; 73/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.352 total
      0.0s
[CV 2/5; 73/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 2/5; 73/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.365 total
time=
       0.0s
```

```
[CV 3/5; 73/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 3/5; 73/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.378 total
time= 0.0s
[CV 4/5; 73/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=2
[CV 4/5; 73/1000] END bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=2;, score=0.394 total
time=
      0.0s
[CV 5/5; 73/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2
[CV 5/5; 73/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=2;, score=0.367 total
[CV 1/5; 74/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=62
[CV 3/5; 71/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134;, score=0.370 total
time=
      1.0s
[CV 2/5; 74/1000] START bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=62
[CV 2/5; 71/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134;, score=0.423 total
time= 1.0s
[CV 3/5; 74/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=62
[CV 4/5; 71/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134;, score=0.382 total
time=
      0.9s
[CV 4/5; 74/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=62
[CV 5/5; 71/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=134;, score=0.387 total
time=
      1.0s
[CV 5/5; 74/1000] START bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=62
[CV 2/5; 72/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=154;, score=0.400 total
time=
      1.3s
[CV 1/5; 75/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160
[CV 1/5; 74/1000] END bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=62;, score=0.382 total
time=
       0.9s
[CV 2/5; 75/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160
[CV 4/5; 74/1000] END bootstrap=False, max depth=18, max features=sqrt,
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min samples leaf=3, min samples split=9, n estimators=62;, score=0.360 total time= 0.7s[CV 3/5; 75/1000] START bootstrap=True, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=160 [CV 1/5; 72/1000] END bootstrap=True, max depth=19, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=154;, score=0.376 total time= 1.5s[CV 4/5; 75/1000] START bootstrap=True, max depth=6, max features=sqrt, min samples leaf=1, min samples split=4, n estimators=160 [CV 2/5; 74/1000] END bootstrap=False, max\_depth=18, max\_features=sqrt, min samples leaf=3, min samples split=9, n estimators=62;, score=0.375 total 0.9stime= [CV 5/5; 75/1000] START bootstrap=True, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=160 [CV 3/5; 74/1000] END bootstrap=False, max depth=18, max features=sqrt, min samples leaf=3, min samples split=9, n estimators=62;, score=0.351 total time= 0.9s [CV 1/5; 76/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=64 [CV 3/5; 72/1000] END bootstrap=True, max depth=19, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=154;, score=0.378 total time= 1.5s[CV 2/5; 76/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=64 [CV 4/5; 72/1000] END bootstrap=True, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=154;, score=0.378 total time= 1.5s [CV 3/5; 76/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=64 [CV 5/5; 72/1000] END bootstrap=True, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=154;, score=0.387 total 1.5s [CV 4/5; 76/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=64 [CV 5/5; 74/1000] END bootstrap=False, max depth=18, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=62;, score=0.381 total time= 0.9s[CV 5/5; 76/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=64 [CV 1/5; 75/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=160;, score=0.409 total 0.6s time= [CV 1/5; 77/1000] START bootstrap=True, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=66 [CV 3/5; 75/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=160;, score=0.379 total time= 0.7s [CV 2/5; 77/1000] START bootstrap=True, max depth=8, max features=None,

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min_samples_leaf=2, min_samples_split=5, n_estimators=66
[CV 2/5; 75/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.411 total
      0.7s
[CV 3/5; 77/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=5, n estimators=66
[CV 4/5; 75/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.403 total
time=
      0.8s
[CV 4/5; 77/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=66
[CV 5/5; 75/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=160;, score=0.401 total
time=
       0.8s
[CV 5/5; 77/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=66
[CV 1/5; 77/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=66;, score=0.417 total
time=
      0.6s
[CV 1/5; 78/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118
[CV 2/5; 77/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=66;, score=0.410 total
time=
      0.6s
[CV 2/5; 78/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118
[CV 3/5; 77/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=5, n estimators=66;, score=0.404 total
[CV 3/5; 78/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118
[CV 4/5; 77/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=66;, score=0.381 total
time=
      0.6s
[CV 4/5; 78/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118
[CV 1/5; 76/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=64;, score=0.385 total
time= 1.4s
[CV 5/5; 78/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118
[CV 5/5; 77/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=5, n estimators=66;, score=0.382 total
time=
      0.7s
[CV 1/5; 79/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 2/5; 76/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=64;, score=0.379 total
```

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time=
        1.4s
[CV 2/5; 79/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 3/5; 76/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=64;, score=0.356 total
time=
        1.4s
[CV 3/5; 79/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 4/5; 76/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=64;, score=0.370 total
time=
      1.3s
[CV 4/5; 79/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 5/5; 76/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=64;, score=0.369 total
time=
      1.3s
[CV 5/5; 79/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 1/5; 78/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=118;, score=0.411 total
      1.2s
time=
[CV 1/5; 80/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122
[CV 4/5; 78/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118;, score=0.375 total
time=
       1.2s
[CV 2/5; 80/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122
[CV 2/5; 78/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118;, score=0.392 total
time=
      1.4s
[CV 3/5; 80/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122
[CV 3/5; 78/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=118;, score=0.362 total
time= 1.4s
[CV 4/5; 80/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122
[CV 5/5; 78/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=118;, score=0.367 total
time=
      1.4s
[CV 5/5; 80/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122
[CV 1/5; 79/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.421 total
[CV 1/5; 81/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182
```

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[CV 2/5; 79/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.413 total
time=
      1.6s
[CV 2/5; 81/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=182
[CV 3/5; 79/1000] END bootstrap=True, max depth=6, max features=None,
min samples leaf=1, min samples split=6, n estimators=194;, score=0.403 total
time=
      1.6s
[CV 3/5; 81/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182
[CV 4/5; 79/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.384 total
time=
      1.6s
[CV 4/5; 81/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182
[CV 5/5; 79/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.389 total
time= 1.6s
[CV 5/5; 81/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=182
[CV 1/5; 80/1000] END bootstrap=False, max depth=10, max features=None,
min samples leaf=1, min samples split=2, n estimators=122;, score=0.385 total
time= 1.9s
[CV 1/5; 82/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60
[CV 1/5; 81/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182;, score=0.412 total
time=
       1.2s
[CV 2/5; 82/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60
[CV 2/5; 81/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182;, score=0.398 total
time=
      1.2s
[CV 3/5; 82/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=60
[CV 3/5; 81/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=182;, score=0.357 total
time=
      1.2s
[CV 4/5; 82/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60
[CV 4/5; 81/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182;, score=0.370 total
[CV 5/5; 82/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60
[CV 2/5; 80/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122;, score=0.362 total
time=
      1.9s
```

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[CV 1/5; 83/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14
[CV 5/5; 81/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=182;, score=0.428 total
time= 1.2s
[CV 2/5; 83/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=14
[CV 1/5; 82/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=60;, score=0.404 total
time=
      0.4s
[CV 3/5; 83/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14
[CV 1/5; 83/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=14;, score=0.402 total
[CV 4/5; 83/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14
[CV 2/5; 83/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14;, score=0.426 total
time=
      0.1s
[CV 5/5; 83/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=14
[CV 3/5; 83/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14;, score=0.378 total
time= 0.1s
[CV 1/5; 84/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 4/5; 83/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=14;, score=0.391 total
time=
      0.1s
[CV 2/5; 84/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 5/5; 83/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=14;, score=0.378 total
time= 0.1s
[CV 3/5; 84/1000] START bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=158
[CV 2/5; 82/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60;, score=0.420 total
time=
      0.5s
[CV 4/5; 84/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 4/5; 82/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=60;, score=0.385 total
time=
       0.5s
[CV 5/5; 84/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 3/5; 80/1000] END bootstrap=False, max depth=10, max features=None,
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min_samples_leaf=1, min_samples_split=2, n_estimators=122;, score=0.331 total
time=
       2.3s
[CV 1/5; 85/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182
[CV 3/5; 82/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=60;, score=0.387 total
time= 0.6s
[CV 2/5; 85/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=8, n estimators=182
[CV 4/5; 80/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122;, score=0.350 total
       2.3s
time=
[CV 3/5; 85/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182
[CV 5/5; 82/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=60;, score=0.391 total
time=
      0.6s
[CV 4/5; 85/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182
[CV 5/5; 80/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=122;, score=0.363 total
time=
       2.3s
[CV 5/5; 85/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182
[CV 2/5; 85/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182;, score=0.408 total
time=
      1.0s
[CV 1/5; 86/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116
[CV 2/5; 84/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.391 total
      1.5s
[CV 2/5; 86/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116
[CV 1/5; 85/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182;, score=0.417 total
time= 1.3s
[CV 3/5; 86/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116
[CV 3/5; 85/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182;, score=0.398 total
       1.3s
time=
[CV 4/5; 86/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116
[CV 4/5; 85/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182;, score=0.373 total
time=
      1.3s
[CV 5/5; 86/1000] START bootstrap=True, max depth=5, max features=None,
```

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min_samples_leaf=2, min_samples_split=9, n_estimators=116
[CV 1/5; 84/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.392 total
      1.7s
[CV 1/5; 87/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=8, n estimators=108
[CV 5/5; 85/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=182;, score=0.389 total
time=
      1.3s
[CV 2/5; 87/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108
[CV 3/5; 84/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.354 total
time=
       1.7s
[CV 3/5; 87/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108
[CV 4/5; 84/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.384 total
time=
      1.7s
[CV 4/5; 87/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108
[CV 1/5; 86/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116;, score=0.427 total
time=
      0.7s
[CV 5/5; 87/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108
[CV 5/5; 84/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.378 total
[CV 1/5; 88/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96
[CV 2/5; 86/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116;, score=0.411 total
time=
      0.7s
[CV 2/5; 88/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=96
[CV 3/5; 86/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116;, score=0.382 total
time= 0.8s
[CV 3/5; 88/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96
[CV 4/5; 86/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116;, score=0.384 total
time=
       0.8s
[CV 4/5; 88/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96
[CV 5/5; 86/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=116;, score=0.397 total
```

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time=
        0.8s
[CV 5/5; 88/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96
[CV 2/5; 87/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=8, n estimators=108;, score=0.408 total
time=
       0.8s
[CV 1/5; 89/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6
[CV 1/5; 87/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108;, score=0.430 total
time= 0.8s
[CV 2/5; 89/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6
[CV 1/5; 88/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96;, score=0.411 total
time=
      0.6s
[CV 3/5; 89/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6
[CV 3/5; 87/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=8, n estimators=108;, score=0.384 total
time=
      0.8s
[CV 4/5; 89/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6
[CV 4/5; 87/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108;, score=0.382 total
time=
       0.8s
[CV 5/5; 89/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6
[CV 5/5; 87/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=108;, score=0.411 total
time=
       0.7s
[CV 1/5; 90/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32
[CV 1/5; 89/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=6;, score=0.377 total
time= 0.2s
[CV 2/5; 90/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32
[CV 2/5; 89/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6;, score=0.388 total
time=
      0.2s
[CV 3/5; 90/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32
[CV 4/5; 89/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6;, score=0.332 total
[CV 3/5; 89/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=6;, score=0.331 total
```

```
time=
        0.2s
[CV 4/5; 90/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32
[CV 5/5; 90/1000] START bootstrap=False, max_depth=13, max_features=None,
min samples leaf=1, min samples split=3, n estimators=32
[CV 5/5; 89/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=5, n estimators=6;, score=0.359 total
time=
      0.2s
[CV 1/5; 91/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152
[CV 2/5; 88/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=96;, score=0.400 total
time=
      0.7s
[CV 2/5; 91/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152
[CV 3/5; 88/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=96;, score=0.362 total
time= 0.7s
[CV 3/5; 91/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=6, n estimators=152
[CV 4/5; 88/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=96;, score=0.382 total
time=
      0.7s
[CV 4/5; 91/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152
[CV 5/5; 88/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=96;, score=0.410 total
time=
      0.7s
[CV 5/5; 91/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152
[CV 1/5; 90/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32;, score=0.395 total
time=
      0.6s
[CV 1/5; 92/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=168
[CV 3/5; 90/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=1, min samples split=3, n estimators=32;, score=0.348 total
time=
      0.7s
[CV 2/5; 92/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 2/5; 90/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=1, min samples split=3, n estimators=32;, score=0.356 total
      0.8s
[CV 3/5; 92/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 5/5; 90/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32;, score=0.366 total
time=
       0.7s
```

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[CV 4/5; 92/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 4/5; 90/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=32;, score=0.366 total
time= 0.8s
[CV 5/5; 92/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=168
[CV 1/5; 92/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=168;, score=0.411 total
time=
      0.8s
[CV 1/5; 93/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28
[CV 1/5; 93/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=3, min samples split=2, n estimators=28;, score=0.414 total
[CV 2/5; 93/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28
[CV 3/5; 92/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.353 total
time=
      1.0s
[CV 3/5; 93/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=2, n estimators=28
[CV 2/5; 92/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.398 total
time= 1.0s
[CV 4/5; 93/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28
[CV 4/5; 92/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.378 total
time=
      1.0s
[CV 5/5; 93/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28
[CV 5/5; 92/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.408 total
time=
      1.0s
[CV 1/5; 94/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=7, n estimators=14
[CV 2/5; 93/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28;, score=0.404 total
time=
      0.3s
[CV 2/5; 94/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=14
[CV 3/5; 93/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=3, min samples split=2, n estimators=28;, score=0.387 total
time=
       0.3s
[CV 3/5; 94/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=14
[CV 4/5; 93/1000] END bootstrap=True, max_depth=10, max_features=None,
```

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min samples leaf=3, min samples split=2, n estimators=28;, score=0.414 total
time=
      0.3s
[CV 4/5; 94/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=14
[CV 5/5; 93/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=28;, score=0.391 total
time= 0.3s
[CV 5/5; 94/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=7, n estimators=14
[CV 1/5; 94/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=7, n estimators=14;, score=0.393 total
time=
       0.3s
[CV 1/5; 95/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82
[CV 2/5; 94/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=7, n estimators=14;, score=0.417 total
time=
      0.2s
[CV 2/5; 95/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82
[CV 4/5; 94/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=14;, score=0.378 total
time= 0.2s
[CV 3/5; 94/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=14;, score=0.394 total
time= 0.2s
[CV 3/5; 95/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82
[CV 4/5; 95/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82
[CV 5/5; 94/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=7, n estimators=14;, score=0.369 total
time= 0.2s
[CV 5/5; 95/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82
[CV 2/5; 95/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82;, score=0.408 total
time= 0.5s
[CV 1/5; 96/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186
[CV 1/5; 95/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82;, score=0.417 total
      0.6s
time=
[CV 2/5; 96/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186
[CV 4/5; 95/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82;, score=0.387 total
time=
       0.6s
[CV 3/5; 96/1000] START bootstrap=False, max_depth=5, max_features=None,
```

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min_samples_leaf=2, min_samples_split=5, n_estimators=186
[CV 3/5; 95/1000] END bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=2, n estimators=82;, score=0.379 total
time= 0.6s
[CV 4/5; 96/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=5, n estimators=186
[CV 5/5; 95/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=82;, score=0.408 total
time=
      0.6s
[CV 5/5; 96/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186
[CV 3/5; 91/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152;, score=0.359 total
time=
        2.7s
[CV 1/5; 97/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72
[CV 1/5; 91/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152;, score=0.380 total
time=
      3.3s
[CV 2/5; 97/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72
[CV 2/5; 91/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152;, score=0.372 total
time=
       3.3s
[CV 3/5; 97/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72
[CV 4/5; 91/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152;, score=0.375 total
[CV 4/5; 97/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72
[CV 5/5; 91/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=152;, score=0.365 total
time=
       3.3s
[CV 5/5; 97/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72
[CV 1/5; 97/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72;, score=0.411 total
time= 0.9s
[CV 1/5; 98/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78
[CV 1/5; 96/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186;, score=0.404 total
time=
       1.7s
[CV 2/5; 98/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78
[CV 2/5; 97/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=72;, score=0.401 total
```

```
time=
        1.0s
[CV 3/5; 98/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78
[CV 3/5; 97/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=72;, score=0.376 total
time=
       0.9s
[CV 4/5; 98/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78
[CV 1/5; 98/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78;, score=0.415 total
time= 0.6s
[CV 5/5; 98/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78
[CV 4/5; 97/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=72;, score=0.384 total
time=
      1.0s
[CV 1/5; 99/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 5/5; 97/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=72;, score=0.388 total
time=
      1.0s
[CV 2/5; 99/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 2/5; 96/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186;, score=0.387 total
time=
       2.0s
[CV 2/5; 98/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=78;, score=0.404 total
[CV 3/5; 99/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 4/5; 99/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 3/5; 96/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=5, n estimators=186;, score=0.397 total
time= 1.9s
[CV 5/5; 99/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 4/5; 96/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186;, score=0.367 total
time=
      1.9s
[CV 1/5; 100/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 5/5; 96/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=186;, score=0.394 total
[CV 2/5; 100/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
```

```
[CV 4/5; 98/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=78;, score=0.413 total
time=
      0.5s
[CV 3/5; 100/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=14
[CV 3/5; 98/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=78;, score=0.387 total
time= 0.5s
[CV 4/5; 100/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 5/5; 98/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=78;, score=0.394 total
time=
      0.6s
[CV 5/5; 100/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 1/5; 100/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14;, score=0.380 total
time= 0.2s
[CV 1/5; 101/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=180
[CV 4/5; 100/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=14;, score=0.370 total
time= 0.2s
[CV 2/5; 101/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180
[CV 3/5; 100/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=14;, score=0.359 total
time=
      0.2s
[CV 3/5; 101/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180
[CV 2/5; 100/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=14;, score=0.382 total
time=
      0.2s
[CV 4/5; 101/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=180
[CV 5/5; 100/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=14;, score=0.356 total
time=
      0.2s
[CV 5/5; 101/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180
[CV 1/5; 99/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=76;, score=0.390 total
[CV 1/5; 102/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190
[CV 2/5; 99/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76;, score=0.419 total
```

time=

1.3s

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[CV 2/5; 102/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190
[CV 4/5; 99/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76;, score=0.384 total
time= 1.3s
[CV 3/5; 102/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=190
[CV 5/5; 99/1000] END bootstrap=True, max depth=20, max features=None,
min samples leaf=2, min samples split=5, n estimators=76;, score=0.382 total
time=
      1.3s
[CV 4/5; 102/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190
[CV 3/5; 99/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=76;, score=0.363 total
[CV 5/5; 102/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190
[CV 2/5; 101/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180;, score=0.416 total
time=
      1.3s
[CV 1/5; 103/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94
[CV 3/5; 101/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=180;, score=0.376 total
time= 1.3s
[CV 2/5; 103/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=94
[CV 1/5; 101/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180;, score=0.401 total
time=
      1.6s
[CV 3/5; 103/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=94
[CV 4/5; 101/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180;, score=0.398 total
time=
      1.5s
[CV 4/5; 103/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94
[CV 5/5; 101/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=180;, score=0.385 total
time=
      1.6s
[CV 5/5; 103/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=94
[CV 1/5; 103/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94;, score=0.395 total
time=
       0.8s
[CV 1/5; 104/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166
[CV 2/5; 103/1000] END bootstrap=True, max depth=20, max features=sqrt,
```

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min samples leaf=1, min samples split=8, n estimators=94;, score=0.403 total
time=
      0.8s
[CV 2/5; 104/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166
[CV 1/5; 102/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190;, score=0.414 total
time= 1.5s
[CV 3/5; 104/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=166
[CV 4/5; 103/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94;, score=0.388 total
      0.9s
time=
[CV 4/5; 104/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166
[CV 3/5; 103/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94;, score=0.379 total
time=
      0.9s
[CV 5/5; 104/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166
[CV 2/5; 102/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190;, score=0.391 total
time= 1.6s
[CV 3/5; 102/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190;, score=0.367 total
time= 1.6s
[CV 1/5; 105/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16
[CV 2/5; 105/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16
[CV 5/5; 103/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=94;, score=0.382 total
time= 0.9s
[CV 3/5; 105/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16
[CV 4/5; 102/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190;, score=0.387 total
time= 1.6s
[CV 4/5; 105/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16
[CV 5/5; 102/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=190;, score=0.388 total
      1.6s
time=
[CV 5/5; 105/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16
[CV 2/5; 105/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=6, n estimators=16;, score=0.413 total
time=
      0.3s
[CV 1/5; 106/1000] START bootstrap=False, max depth=5, max features=sqrt,
```

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min_samples_leaf=1, min_samples_split=3, n_estimators=96
[CV 1/5; 105/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=6, n estimators=16;, score=0.389 total
time= 0.3s
[CV 2/5; 106/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96
[CV 4/5; 105/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=16;, score=0.400 total
time=
      0.3s
[CV 3/5; 106/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=96
[CV 3/5; 105/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=6, n estimators=16;, score=0.385 total
time=
       0.3s
[CV 4/5; 106/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=96
[CV 5/5; 105/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=6, n estimators=16;, score=0.401 total
time=
      0.3s
[CV 5/5; 106/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96
[CV 2/5; 104/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166;, score=0.406 total
time=
      1.3s
[CV 1/5; 107/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 1/5; 104/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166;, score=0.387 total
[CV 2/5; 107/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 1/5; 106/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96;, score=0.412 total
time=
      0.6s
[CV 3/5; 107/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 2/5; 106/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=96;, score=0.398 total
time= 0.6s
[CV 4/5; 107/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 3/5; 106/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96;, score=0.350 total
time=
       0.6s
[CV 5/5; 107/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 4/5; 106/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96;, score=0.391 total
```

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0.6s
time=
[CV 1/5; 108/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162
[CV 5/5; 106/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=96;, score=0.413 total
time=
       0.6s
[CV 2/5; 108/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162
[CV 3/5; 104/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166;, score=0.367 total
time=
      1.5s
[CV 3/5; 108/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162
[CV 4/5; 104/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=166;, score=0.382 total
time= 1.6s
[CV 4/5; 108/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162
[CV 5/5; 104/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=166;, score=0.382 total
time=
      1.6s
[CV 5/5; 108/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162
[CV 1/5; 108/1000] END bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162;, score=0.404 total
time=
       2.4s
[CV 1/5; 109/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 2/5; 108/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162;, score=0.404 total
time=
       2.4s
[CV 2/5; 109/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 4/5; 108/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=9, n estimators=162;, score=0.392 total
       2.0s
time=
[CV 3/5; 109/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 1/5; 109/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.443 total
time=
      0.3s
[CV 4/5; 109/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 3/5; 109/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.389 total
[CV 5/5; 109/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
```

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[CV 2/5; 109/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.403 total
time=
      0.3s
[CV 1/5; 110/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=154
[CV 3/5; 108/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=9, n estimators=162;, score=0.381 total
time=
       2.5s
[CV 2/5; 110/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154
[CV 4/5; 107/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.338 total
time=
       3.0s
[CV 3/5; 110/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154
[CV 5/5; 108/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=162;, score=0.389 total
       2.4s
[CV 4/5; 110/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=154
[CV 5/5; 109/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=56;, score=0.407 total
      0.3s
[CV 5/5; 110/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154
[CV 4/5; 109/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=56;, score=0.395 total
time=
      0.3s
[CV 1/5; 111/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128
[CV 2/5; 107/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.378 total
time=
      3.5s
[CV 2/5; 111/1000] START bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=5, n estimators=128
[CV 5/5; 107/1000] END bootstrap=False, max depth=17, max features=None,
min samples leaf=2, min samples split=9, n estimators=140;, score=0.356 total
time=
       3.6s
[CV 3/5; 111/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128
[CV 1/5; 107/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.385 total
[CV 4/5; 111/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128
[CV 3/5; 107/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.337 total
time=
       3.7s
```

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[CV 5/5; 111/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128
[CV 3/5; 110/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154;, score=0.362 total
time= 1.1s
[CV 1/5; 112/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78
[CV 1/5; 110/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=154;, score=0.409 total
time=
      1.3s
[CV 2/5; 112/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 5/5; 110/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154;, score=0.388 total
[CV 3/5; 112/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 1/5; 111/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128;, score=0.415 total
time=
      1.0s
[CV 4/5; 112/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78
[CV 2/5; 110/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154;, score=0.394 total
time= 1.3s
[CV 5/5; 112/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 4/5; 110/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=154;, score=0.387 total
time=
      1.3s
[CV 1/5; 113/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 2/5; 111/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128;, score=0.417 total
time=
      1.0s
[CV 2/5; 113/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=138
[CV 3/5; 111/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128;, score=0.389 total
time=
      1.0s
[CV 3/5; 113/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 4/5; 111/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=128;, score=0.387 total
time=
      1.1s
[CV 4/5; 113/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 5/5; 111/1000] END bootstrap=True, max_depth=6, max_features=None,
```

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min_samples_leaf=3, min_samples_split=5, n_estimators=128;, score=0.384 total
time=
      1.0s
[CV 5/5; 113/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 1/5; 112/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78;, score=0.405 total
time= 0.7s
[CV 1/5; 114/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=5, n estimators=148
[CV 2/5; 112/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.391 total
      0.7s
time=
[CV 2/5; 114/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148
[CV 3/5; 112/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.366 total
time=
      0.8s
[CV 3/5; 114/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148
[CV 4/5; 112/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78;, score=0.388 total
time= 0.8s
[CV 4/5; 114/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148
[CV 5/5; 112/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.389 total
time=
      0.8s
[CV 5/5; 114/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148
[CV 2/5; 113/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.391 total
      1.3s
[CV 1/5; 115/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178
[CV 1/5; 113/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.402 total
time= 1.6s
[CV 2/5; 115/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178
[CV 3/5; 113/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.378 total
      1.6s
time=
[CV 3/5; 115/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178
[CV 4/5; 113/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.394 total
time=
      1.6s
[CV 4/5; 115/1000] START bootstrap=True, max depth=10, max features=None,
```

```
min_samples_leaf=1, min_samples_split=7, n_estimators=178
[CV 5/5; 113/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.376 total
time= 1.6s
[CV 5/5; 115/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=1, min samples split=7, n estimators=178
[CV 2/5; 114/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148;, score=0.410 total
time=
       2.0s
[CV 1/5; 116/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184
[CV 1/5; 114/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148;, score=0.398 total
time=
        2.5s
[CV 2/5; 116/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184
[CV 3/5; 114/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148;, score=0.381 total
time=
      2.5s
[CV 3/5; 116/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=7, n estimators=184
[CV 1/5; 115/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178;, score=0.398 total
time=
      1.7s
[CV 4/5; 116/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184
[CV 5/5; 114/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148;, score=0.375 total
[CV 5/5; 116/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184
[CV 4/5; 114/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=148;, score=0.362 total
time=
       2.6s
[CV 1/5; 117/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=174
[CV 2/5; 115/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178;, score=0.420 total
time= 2.1s
[CV 2/5; 117/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174
[CV 1/5; 117/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174;, score=0.411 total
time=
      0.7s
[CV 3/5; 117/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174
[CV 3/5; 115/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178;, score=0.392 total
```

```
time=
        2.2s
[CV 4/5; 117/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174
[CV 4/5; 115/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=1, min samples split=7, n estimators=178;, score=0.413 total
time=
        2.1s
[CV 5/5; 117/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174
[CV 5/5; 115/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=178;, score=0.384 total
time=
       2.1s
[CV 1/5; 118/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 2/5; 117/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174;, score=0.420 total
time=
      0.7s
[CV 2/5; 118/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 3/5; 117/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=174;, score=0.378 total
time=
      0.7s
[CV 3/5; 118/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 4/5; 117/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174;, score=0.385 total
time=
       0.7s
[CV 4/5; 118/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 5/5; 117/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=174;, score=0.379 total
      0.7s
time=
[CV 5/5; 118/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 1/5; 116/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=7, n estimators=184;, score=0.408 total
      2.4s
time=
[CV 1/5; 119/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 1/5; 119/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28;, score=0.399 total
time=
      0.5s
[CV 2/5; 119/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 4/5; 116/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184;, score=0.387 total
[CV 3/5; 119/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
```

```
[CV 2/5; 116/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184;, score=0.406 total
time=
       2.7s
[CV 4/5; 119/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=4, n estimators=28
[CV 3/5; 116/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=7, n estimators=184;, score=0.376 total
time=
       2.6s
[CV 5/5; 119/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 5/5; 116/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=184;, score=0.381 total
time=
       2.6s
[CV 1/5; 120/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140
[CV 2/5; 119/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28;, score=0.400 total
time= 0.5s
[CV 2/5; 120/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=140
[CV 3/5; 119/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=4, n estimators=28;, score=0.387 total
time= 0.4s
[CV 3/5; 120/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140
[CV 4/5; 119/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=4, n estimators=28;, score=0.388 total
time=
      0.4s
[CV 4/5; 120/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140
[CV 5/5; 119/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=28;, score=0.378 total
time=
      0.5s
[CV 5/5; 120/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=140
[CV 1/5; 120/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=140;, score=0.392 total
time=
      1.2s
[CV 1/5; 121/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158
[CV 3/5; 120/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140;, score=0.375 total
[CV 2/5; 121/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158
[CV 2/5; 120/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140;, score=0.398 total
```

time=

1.4s

```
[CV 3/5; 121/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158
[CV 4/5; 120/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=140;, score=0.382 total
time= 1.3s
[CV 4/5; 121/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=9, n estimators=158
[CV 5/5; 120/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=140;, score=0.379 total
time=
      1.3s
[CV 5/5; 121/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158
[CV 1/5; 118/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.393 total
[CV 1/5; 122/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106
[CV 2/5; 118/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.353 total
time=
      3.8s
[CV 2/5; 122/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=4, n estimators=106
[CV 4/5; 118/1000] END bootstrap=False, max depth=19, max features=None,
min samples leaf=1, min samples split=4, n estimators=130;, score=0.335 total
time= 3.5s
[CV 3/5; 122/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106
[CV 1/5; 121/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158;, score=0.404 total
time=
      1.4s
[CV 4/5; 122/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106
[CV 3/5; 118/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.316 total
time=
      3.8s
[CV 5/5; 122/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=4, n estimators=106
[CV 5/5; 118/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.362 total
time=
      3.7s
[CV 1/5; 123/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 3/5; 121/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158;, score=0.397 total
time=
       1.5s
[CV 2/5; 123/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 2/5; 121/1000] END bootstrap=False, max depth=5, max features=None,
```

```
min_samples_leaf=2, min_samples_split=9, n_estimators=158;, score=0.387 total
time=
      1.7s
[CV 3/5; 123/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 4/5; 121/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158;, score=0.367 total
time= 1.7s
[CV 4/5; 123/1000] START bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=9, n estimators=196
[CV 5/5; 121/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=158;, score=0.394 total
       1.7s
time=
[CV 5/5; 123/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 1/5; 122/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106;, score=0.380 total
time=
      1.6s
[CV 1/5; 124/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128
[CV 4/5; 122/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=4, n estimators=106;, score=0.359 total
time= 1.3s
[CV 2/5; 124/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128
[CV 3/5; 122/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106;, score=0.351 total
time=
      1.7s
[CV 3/5; 124/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128
[CV 2/5; 122/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106;, score=0.367 total
      1.7s
[CV 4/5; 124/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128
[CV 2/5; 123/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.414 total
time= 1.4s
[CV 5/5; 124/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128
[CV 1/5; 123/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.418 total
time=
      1.6s
[CV 1/5; 125/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=96
[CV 5/5; 122/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=106;, score=0.370 total
time=
      1.7s
[CV 2/5; 125/1000] START bootstrap=True, max depth=10, max features=None,
```

```
min_samples_leaf=2, min_samples_split=8, n_estimators=96
[CV 3/5; 123/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.404 total
time= 1.6s
[CV 3/5; 125/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=8, n estimators=96
[CV 4/5; 123/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.379 total
time=
      1.6s
[CV 4/5; 125/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=96
[CV 5/5; 123/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.388 total
time=
      1.6s
[CV 5/5; 125/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=96
[CV 1/5; 124/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128;, score=0.402 total
time=
      1.7s
[CV 1/5; 126/1000] START bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=84
[CV 2/5; 124/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128;, score=0.404 total
time=
      1.4s
[CV 2/5; 126/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 1/5; 125/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=8, n estimators=96;, score=0.417 total
[CV 3/5; 126/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 2/5; 125/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=8, n estimators=96;, score=0.407 total
time=
      1.2s
[CV 4/5; 126/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 5/5; 124/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128;, score=0.384 total
time= 1.5s
[CV 5/5; 126/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 3/5; 125/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=8, n estimators=96;, score=0.392 total
time=
      1.2s
[CV 1/5; 127/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 3/5; 124/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=128;, score=0.389 total
```

```
time=
        1.7s
[CV 2/5; 127/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 4/5; 124/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=6, n estimators=128;, score=0.410 total
time=
       1.7s
[CV 3/5; 127/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 1/5; 127/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14;, score=0.442 total
time= 0.2s
[CV 4/5; 127/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 4/5; 125/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=96;, score=0.400 total
time=
      1.1s
[CV 5/5; 127/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14
[CV 2/5; 127/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=2, min samples split=3, n estimators=14;, score=0.389 total
time=
      0.2s
[CV 1/5; 128/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 3/5; 127/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14;, score=0.403 total
time=
       0.2s
[CV 2/5; 128/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 5/5; 125/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=96;, score=0.385 total
time=
      1.2s
[CV 4/5; 127/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=2, min samples split=3, n estimators=14;, score=0.385 total
time=
      0.2s
[CV 3/5; 128/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=1, min samples split=6, n estimators=46
[CV 4/5; 128/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 5/5; 127/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=14;, score=0.410 total
time=
      0.2s
[CV 5/5; 128/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 2/5; 126/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84;, score=0.385 total
[CV 1/5; 129/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182
```

```
[CV 1/5; 126/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84;, score=0.406 total
time=
      1.0s
[CV 2/5; 129/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=3, min samples split=7, n estimators=182
[CV 3/5; 126/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=84;, score=0.365 total
time= 1.0s
[CV 3/5; 129/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182
[CV 5/5; 126/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=84;, score=0.394 total
time=
      0.9s
[CV 4/5; 129/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182
[CV 4/5; 126/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84;, score=0.384 total
time= 1.0s
[CV 5/5; 129/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=3, min samples split=7, n estimators=182
[CV 1/5; 128/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.399 total
time= 0.7s
[CV 1/5; 130/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44
[CV 2/5; 128/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.394 total
time=
      0.7s
[CV 2/5; 130/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44
[CV 4/5; 128/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46;, score=0.367 total
time=
      0.8s
[CV 3/5; 130/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=44
[CV 5/5; 128/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.376 total
time=
      0.7s
[CV 4/5; 130/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44
[CV 3/5; 128/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.370 total
      0.8s
[CV 5/5; 130/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44
[CV 1/5; 130/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=44;, score=0.412 total
```

time=

0.7s

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[CV 1/5; 131/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76
[CV 2/5; 130/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44;, score=0.382 total
time= 0.7s
[CV 2/5; 131/1000] START bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=76
[CV 4/5; 130/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=44;, score=0.375 total
time=
      0.6s
[CV 3/5; 131/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76
[CV 3/5; 130/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=44;, score=0.346 total
[CV 4/5; 131/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76
[CV 5/5; 130/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=44;, score=0.378 total
time=
      0.6s
[CV 5/5; 131/1000] START bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=76
[CV 1/5; 131/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76;, score=0.401 total
time= 0.9s
[CV 1/5; 132/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48
[CV 2/5; 131/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=76;, score=0.392 total
time=
      0.9s
[CV 2/5; 132/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48
[CV 4/5; 131/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76;, score=0.384 total
time= 0.9s
[CV 3/5; 132/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=7, n estimators=48
[CV 3/5; 131/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=76;, score=0.363 total
time=
      0.9s
[CV 4/5; 132/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48
[CV 5/5; 131/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=76;, score=0.391 total
time=
       0.9s
[CV 5/5; 132/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48
[CV 1/5; 129/1000] END bootstrap=True, max depth=17, max features=None,
```

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min_samples_leaf=3, min_samples_split=7, n_estimators=182;, score=0.396 total
time=
       2.5s
[CV 1/5; 133/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=112
[CV 1/5; 132/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48;, score=0.425 total
time= 0.6s
[CV 2/5; 133/1000] START bootstrap=False, max_depth=6, max_features=None,
min samples leaf=3, min samples split=6, n estimators=112
[CV 4/5; 129/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182;, score=0.378 total
       2.4s
time=
[CV 3/5; 133/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=112
[CV 2/5; 132/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=7, n estimators=48;, score=0.400 total
time=
      0.6s
[CV 4/5; 133/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=112
[CV 3/5; 132/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=48;, score=0.394 total
time= 0.6s
[CV 5/5; 133/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=112
[CV 4/5; 132/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=7, n estimators=48;, score=0.400 total
time= 0.6s
[CV 1/5; 134/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182
[CV 5/5; 132/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=7, n estimators=48;, score=0.385 total
time= 0.6s
[CV 2/5; 134/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182
[CV 2/5; 129/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182;, score=0.401 total
time=
       2.9s
[CV 3/5; 134/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182
[CV 3/5; 129/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182;, score=0.373 total
       3.0s
time=
[CV 4/5; 134/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182
[CV 5/5; 129/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=182;, score=0.387 total
time=
       2.9s
```

[CV 5/5; 134/1000] START bootstrap=True, max depth=17, max features=None,

min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=182 [CV 1/5; 133/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=112;, score=0.395 total time= 1.1s [CV 1/5; 135/1000] START bootstrap=True, max depth=None, max features=None, min samples leaf=2, min samples split=6, n estimators=16 [CV 1/5; 135/1000] END bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=16;, score=0.376 total time= 0.3s [CV 2/5; 135/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=16 [CV 3/5; 133/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=112;, score=0.334 total time= 1.2s [CV 3/5; 135/1000] START bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=16 [CV 2/5; 135/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=2, min samples split=6, n estimators=16;, score=0.410 total time= 0.2s [CV 4/5; 135/1000] START bootstrap=True, max depth=None, max features=None, min samples leaf=2, min samples split=6, n estimators=16 [CV 2/5; 133/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=112;, score=0.385 total time= 1.4s[CV 5/5; 135/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=16 [CV 4/5; 133/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=112;, score=0.370 total [CV 1/5; 136/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52 [CV 5/5; 133/1000] END bootstrap=False, max\_depth=6, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=112;, score=0.387 total time= 1.4s[CV 2/5; 136/1000] START bootstrap=True, max\_depth=17, max\_features=None, min samples leaf=1, min samples split=7, n estimators=52 [CV 3/5; 135/1000] END bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=16;, score=0.385 total time= 0.3s[CV 3/5; 136/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52 [CV 4/5; 135/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=2, min samples split=6, n estimators=16;, score=0.391 total time= 0.3s [CV 4/5; 136/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52 [CV 5/5; 135/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=2, min samples split=6, n estimators=16;, score=0.391 total

0.3stime= [CV 5/5; 136/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52 [CV 3/5; 136/1000] END bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52;, score=0.372 total time= 0.7s [CV 1/5; 137/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24 [CV 2/5; 136/1000] END bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52;, score=0.404 total time= 0.9s[CV 2/5; 137/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24 [CV 1/5; 136/1000] END bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52;, score=0.399 total time= 0.9s [CV 3/5; 137/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24 [CV 4/5; 136/1000] END bootstrap=True, max\_depth=17, max\_features=None, min samples leaf=1, min samples split=7, n estimators=52;, score=0.382 total time= 0.8s [CV 4/5; 137/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24 [CV 5/5; 136/1000] END bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=52;, score=0.373 total time= 0.9s[CV 1/5; 137/1000] END bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24;, score=0.418 total [CV 5/5; 137/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24 [CV 1/5; 138/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=108 [CV 2/5; 137/1000] END bootstrap=True, max\_depth=17, max\_features=None, min samples leaf=2, min samples split=9, n estimators=24;, score=0.413 total time= 0.4s[CV 2/5; 138/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=108 [CV 3/5; 137/1000] END bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24;, score=0.391 total time= 0.4s[CV 3/5; 138/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=108 [CV 4/5; 137/1000] END bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=24;, score=0.388 total [CV 4/5; 138/1000] START bootstrap=True, max\_depth=16, max\_features=None,

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=108

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[CV 2/5; 134/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182;, score=0.400 total
time=
       2.7s
[CV 5/5; 138/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=108
[CV 5/5; 137/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=24;, score=0.370 total
time= 0.4s
[CV 1/5; 139/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118
[CV 1/5; 134/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182;, score=0.396 total
time=
      3.1s
[CV 2/5; 139/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118
[CV 3/5; 134/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182;, score=0.365 total
      3.1s
[CV 3/5; 139/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=4, n estimators=118
[CV 4/5; 134/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=4, n estimators=182;, score=0.366 total
time=
      3.0s
[CV 4/5; 139/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118
[CV 5/5; 134/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=182;, score=0.369 total
time=
       3.1s
[CV 5/5; 139/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118
[CV 1/5; 138/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=108;, score=0.401 total
time= 1.4s
[CV 1/5; 140/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=2, min samples split=3, n estimators=136
[CV 5/5; 138/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=5, n estimators=108;, score=0.381 total
time=
      1.5s
[CV 2/5; 140/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136
[CV 2/5; 138/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=108;, score=0.389 total
[CV 3/5; 140/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136
[CV 4/5; 138/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=108;, score=0.379 total
time=
       1.6s
```

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[CV 4/5; 140/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136
[CV 3/5; 138/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=108;, score=0.388 total
time= 1.7s
[CV 5/5; 140/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=2, min samples split=3, n estimators=136
[CV 1/5; 139/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=2, min samples split=4, n estimators=118;, score=0.404 total
time=
       2.9s
[CV 1/5; 141/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 1/5; 140/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136;, score=0.379 total
[CV 2/5; 141/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 2/5; 139/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118;, score=0.365 total
time=
      2.9s
[CV 3/5; 141/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=100
[CV 5/5; 139/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118;, score=0.378 total
time= 2.4s
[CV 4/5; 141/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 3/5; 139/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118;, score=0.340 total
time=
       2.9s
[CV 5/5; 141/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 4/5; 139/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=118;, score=0.351 total
time=
      2.8s
[CV 1/5; 142/1000] START bootstrap=False, max depth=6, max features=None,
min samples leaf=1, min samples split=7, n estimators=8
[CV 1/5; 141/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.412 total
time= 0.6s
[CV 2/5; 142/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 1/5; 142/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.396 total
time=
      0.1s
[CV 3/5; 142/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 2/5; 141/1000] END bootstrap=False, max depth=5, max features=sqrt,
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min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.397 total
time=
      0.5s
[CV 4/5; 142/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 2/5; 142/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.387 total
time= 0.1s
[CV 5/5; 142/1000] START bootstrap=False, max_depth=6, max_features=None,
min samples leaf=1, min samples split=7, n estimators=8
[CV 3/5; 142/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.335 total
time=
      0.1s
[CV 1/5; 143/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 2/5; 140/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136;, score=0.398 total
time=
       2.3s
[CV 2/5; 143/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 4/5; 141/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.379 total
time= 0.5s
[CV 3/5; 143/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 4/5; 142/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.375 total
time= 0.1s
[CV 4/5; 143/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 5/5; 142/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.391 total
time= 0.1s
[CV 5/5; 143/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 4/5; 140/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136;, score=0.365 total
time= 2.3s
[CV 1/5; 144/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 3/5; 141/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.353 total
      0.6s
time=
[CV 2/5; 144/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 3/5; 140/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136;, score=0.369 total
time=
       2.4s
```

[CV 3/5; 144/1000] START bootstrap=False, max depth=7, max features=sqrt,

```
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 5/5; 140/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=136;, score=0.367 total
time=
       2.3s
[CV 4/5; 144/1000] START bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=134
[CV 5/5; 141/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.411 total
time=
      0.6s
[CV 5/5; 144/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 4/5; 143/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.373 total
time=
      0.4s
[CV 1/5; 145/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30
[CV 3/5; 143/1000] END bootstrap=False, max_depth=6, max_features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.335 total
time=
      0.5s
[CV 2/5; 145/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=30
[CV 2/5; 143/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38;, score=0.385 total
time=
      0.5s
[CV 3/5; 145/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30
[CV 1/5; 143/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.395 total
[CV 4/5; 145/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30
[CV 5/5; 143/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.392 total
time=
      0.5s
[CV 5/5; 145/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30
[CV 1/5; 145/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30;, score=0.406 total
time= 0.2s
[CV 1/5; 146/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168
[CV 2/5; 145/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=30;, score=0.404 total
time=
      0.2s
[CV 3/5; 145/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=30;, score=0.362 total
time=
      0.2s
```

[CV 2/5; 146/1000] START bootstrap=True, max depth=20, max features=sqrt,

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min_samples_leaf=3, min_samples_split=9, n_estimators=168
[CV 3/5; 146/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168
[CV 4/5; 145/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=30;, score=0.395 total
time=
       0.2s
[CV 4/5; 146/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=168
[CV 5/5; 145/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=30;, score=0.401 total
time= 0.2s
[CV 5/5; 146/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168
[CV 3/5; 144/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.366 total
time=
      0.9s
[CV 1/5; 147/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56
[CV 1/5; 144/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=134;, score=0.411 total
time=
      1.0s
[CV 2/5; 147/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56
[CV 2/5; 144/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.397 total
time=
       1.0s
[CV 3/5; 147/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56
[CV 4/5; 144/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.382 total
time=
      1.0s
[CV 4/5; 147/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56
[CV 5/5; 144/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=134;, score=0.381 total
time= 1.0s
[CV 5/5; 147/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56
[CV 1/5; 147/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56;, score=0.406 total
time=
      0.9s
[CV 1/5; 148/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132
[CV 2/5; 146/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168;, score=0.404 total
[CV 2/5; 148/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132
```

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[CV 1/5; 146/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168;, score=0.405 total
time=
      1.4s
[CV 3/5; 148/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=132
[CV 2/5; 147/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56;, score=0.411 total
time= 0.9s
[CV 4/5; 148/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132
[CV 3/5; 147/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=9, n estimators=56;, score=0.384 total
time=
      0.9s
[CV 5/5; 148/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132
[CV 4/5; 147/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=56;, score=0.376 total
time= 0.9s
[CV 1/5; 149/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=1, min samples split=8, n estimators=146
[CV 5/5; 147/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=9, n estimators=56;, score=0.367 total
time= 0.9s
[CV 2/5; 149/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 3/5; 146/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168;, score=0.387 total
time=
      1.6s
[CV 3/5; 149/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 4/5; 146/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=168;, score=0.395 total
time=
      1.5s
[CV 4/5; 149/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=1, min samples split=8, n estimators=146
[CV 5/5; 146/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=168;, score=0.395 total
time=
      1.6s
[CV 5/5; 149/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 3/5; 148/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132;, score=0.372 total
[CV 1/5; 150/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140
[CV 2/5; 148/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132;, score=0.407 total
time=
       1.3s
```

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[CV 2/5; 150/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140
[CV 1/5; 148/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132;, score=0.401 total
time= 1.3s
[CV 3/5; 150/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=5, n estimators=140
[CV 4/5; 148/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=132;, score=0.381 total
time=
      1.3s
[CV 4/5; 150/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140
[CV 5/5; 148/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=132;, score=0.397 total
[CV 5/5; 150/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140
[CV 1/5; 150/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140;, score=0.423 total
time=
      0.8s
[CV 1/5; 151/1000] START bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=8
[CV 1/5; 151/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=8;, score=0.417 total
time= 0.0s
[CV 2/5; 151/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 2/5; 151/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.381 total
time=
      0.1s
[CV 3/5; 151/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 3/5; 151/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.351 total
time= 0.1s
[CV 4/5; 151/1000] START bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=8
[CV 4/5; 151/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.366 total
time= 0.1s
[CV 5/5; 151/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8
[CV 5/5; 151/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=8;, score=0.392 total
time=
       0.1s
[CV 1/5; 152/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106
[CV 2/5; 150/1000] END bootstrap=True, max_depth=5, max_features=None,
```

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min_samples_leaf=2, min_samples_split=5, n_estimators=140;, score=0.408 total
time=
      1.0s
[CV 3/5; 150/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140;, score=0.389 total
time= 1.0s
[CV 2/5; 152/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=7, n estimators=106
[CV 3/5; 152/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106
[CV 4/5; 150/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140;, score=0.372 total
      1.0s
[CV 4/5; 152/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106
[CV 5/5; 150/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=140;, score=0.388 total
time=
      1.0s
[CV 5/5; 152/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106
[CV 1/5; 152/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106;, score=0.405 total
time= 1.1s
[CV 1/5; 153/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=68
[CV 3/5; 152/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106;, score=0.398 total
time=
      1.1s
[CV 2/5; 153/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=68
[CV 2/5; 152/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106;, score=0.387 total
time= 1.1s
[CV 3/5; 153/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=68
[CV 4/5; 152/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106;, score=0.367 total
time= 1.1s
[CV 4/5; 153/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=68
[CV 5/5; 152/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=106;, score=0.395 total
time=
      1.1s
[CV 5/5; 153/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=68
[CV 3/5; 149/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.331 total
time=
       3.3s
[CV 4/5; 149/1000] END bootstrap=False, max_depth=15, max_features=None,
```

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min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.343 total
time=
      3.2s
[CV 1/5; 154/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28
[CV 2/5; 154/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=3, n estimators=28
[CV 1/5; 149/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.393 total
time=
      3.4s
[CV 3/5; 154/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28
[CV 5/5; 149/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.378 total
time=
       3.5s
[CV 4/5; 154/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28
[CV 2/5; 149/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.379 total
time=
      3.7s
[CV 5/5; 154/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=3, n estimators=28
[CV 1/5; 153/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=68;, score=0.399 total
time=
      0.6s
[CV 1/5; 155/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156
[CV 2/5; 153/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=68;, score=0.391 total
[CV 2/5; 155/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156
[CV 3/5; 153/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=68;, score=0.370 total
time=
      0.6s
[CV 3/5; 155/1000] START bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=156
[CV 2/5; 154/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28;, score=0.370 total
time= 0.5s
[CV 4/5; 155/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156
[CV 4/5; 153/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=68;, score=0.375 total
time=
      0.6s
[CV 5/5; 155/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156
[CV 5/5; 153/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
```

min samples leaf=3, min samples split=6, n estimators=68;, score=0.376 total

```
time=
        0.6s
[CV 1/5; 156/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42
[CV 3/5; 154/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=3, n estimators=28;, score=0.356 total
time=
       0.6s
[CV 2/5; 156/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42
[CV 1/5; 154/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28;, score=0.390 total
time= 0.6s
[CV 3/5; 156/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42
[CV 4/5; 154/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=28;, score=0.378 total
time= 0.6s
[CV 4/5; 156/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42
[CV 5/5; 154/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=3, n estimators=28;, score=0.372 total
time=
      0.6s
[CV 5/5; 156/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42
[CV 2/5; 156/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42;, score=0.387 total
time=
       0.6s
[CV 1/5; 156/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42;, score=0.380 total
[CV 1/5; 157/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 2/5; 157/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 3/5; 156/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=42;, score=0.356 total
time= 0.6s
[CV 3/5; 157/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 5/5; 156/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42;, score=0.350 total
time=
      0.5s
[CV 4/5; 157/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 4/5; 156/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=42;, score=0.394 total
[CV 5/5; 157/1000] START bootstrap=True, max_depth=5, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=104

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[CV 2/5; 155/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156;, score=0.411 total
time=
      1.2s
[CV 1/5; 158/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=186
[CV 4/5; 155/1000] END bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=156;, score=0.381 total
time= 1.2s
[CV 2/5; 158/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186
[CV 1/5; 155/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156;, score=0.421 total
time=
      1.3s
[CV 3/5; 158/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186
[CV 3/5; 155/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=156;, score=0.403 total
time= 1.3s
[CV 4/5; 158/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=186
[CV 5/5; 155/1000] END bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=156;, score=0.392 total
time=
      1.3s
[CV 5/5; 158/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186
[CV 1/5; 157/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104;, score=0.420 total
time=
      0.7s
[CV 1/5; 159/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144
[CV 3/5; 157/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104;, score=0.394 total
time=
      0.7s
[CV 2/5; 159/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=5, n estimators=144
[CV 2/5; 157/1000] END bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=9, n estimators=104;, score=0.404 total
time=
      0.8s
[CV 3/5; 159/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144
[CV 4/5; 157/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104;, score=0.378 total
      0.6s
[CV 4/5; 159/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144
[CV 5/5; 157/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104;, score=0.407 total
time=
       0.7s
```

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[CV 5/5; 159/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144
[CV 4/5; 159/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144;, score=0.400 total
time= 1.2s
[CV 1/5; 160/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=5, n estimators=38
[CV 1/5; 159/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=1, min samples split=5, n estimators=144;, score=0.408 total
time=
      1.5s
[CV 2/5; 160/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 2/5; 159/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144;, score=0.414 total
[CV 3/5; 160/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 3/5; 159/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144;, score=0.404 total
time=
      1.6s
[CV 4/5; 160/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=5, n estimators=38
[CV 5/5; 159/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=144;, score=0.387 total
time= 1.5s
[CV 5/5; 160/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 1/5; 160/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.415 total
time=
      0.5s
[CV 1/5; 161/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156
[CV 1/5; 158/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186;, score=0.399 total
time=
      2.3s
[CV 2/5; 161/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=2, n estimators=156
[CV 2/5; 160/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38;, score=0.376 total
time=
      0.6s
[CV 3/5; 161/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156
[CV 3/5; 160/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.373 total
time=
       0.6s
[CV 4/5; 161/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156
[CV 4/5; 160/1000] END bootstrap=True, max depth=14, max features=None,
```

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min samples leaf=1, min samples split=5, n estimators=38;, score=0.389 total
time=
      0.6s
[CV 5/5; 161/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156
[CV 5/5; 160/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38;, score=0.367 total
time= 0.6s
[CV 1/5; 162/1000] START bootstrap=False, max_depth=18, max_features=None,
min samples leaf=2, min samples split=5, n estimators=76
[CV 2/5; 158/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186;, score=0.381 total
       2.8s
time=
[CV 2/5; 162/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 3/5; 158/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186;, score=0.346 total
time=
       2.8s
[CV 3/5; 162/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 4/5; 158/1000] END bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186;, score=0.357 total
       2.8s
time=
[CV 4/5; 162/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 5/5; 158/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=186;, score=0.369 total
time=
      2.8s
[CV 5/5; 162/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=76
[CV 1/5; 161/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156;, score=0.418 total
time= 0.9s
[CV 1/5; 163/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=18
[CV 2/5; 161/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156;, score=0.419 total
time= 0.9s
[CV 2/5; 163/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=18
[CV 1/5; 163/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=18;, score=0.401 total
      0.2s
time=
[CV 3/5; 163/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=18
[CV 3/5; 161/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=156;, score=0.392 total
time=
      1.1s
```

[CV 4/5; 163/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt,

min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=18 [CV 2/5; 163/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=18;, score=0.367 total time= 0.2s[CV 5/5; 163/1000] START bootstrap=False, max depth=16, max features=sqrt, min samples leaf=2, min samples split=2, n estimators=18 [CV 4/5; 161/1000] END bootstrap=True, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=156;, score=0.372 total time= 1.1s[CV 1/5; 164/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=148 [CV 3/5; 163/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=18;, score=0.370 total time= 0.2s [CV 2/5; 164/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=148 [CV 5/5; 161/1000] END bootstrap=True, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=156;, score=0.387 total time= 1.1s[CV 3/5; 164/1000] START bootstrap=False, max depth=12, max features=None, min samples leaf=3, min samples split=3, n estimators=148 [CV 5/5; 163/1000] END bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=18;, score=0.384 total time= 0.2s [CV 4/5; 164/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=148 [CV 4/5; 163/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=18;, score=0.343 total [CV 5/5; 164/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=148 [CV 1/5; 162/1000] END bootstrap=False, max\_depth=18, max\_features=None, min samples leaf=2, min samples split=5, n estimators=76;, score=0.374 total time= 2.1s [CV 1/5; 165/1000] START bootstrap=True, max\_depth=16, max\_features=None, min samples leaf=2, min samples split=8, n estimators=184 [CV 4/5; 162/1000] END bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=76;, score=0.341 total time= 2.0s [CV 2/5; 165/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=184 [CV 2/5; 162/1000] END bootstrap=False, max\_depth=18, max\_features=None, min samples leaf=2, min samples split=5, n estimators=76;, score=0.346 total time= 2.1s[CV 3/5; 165/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=184 [CV 3/5; 162/1000] END bootstrap=False, max\_depth=18, max\_features=None, min samples leaf=2, min samples split=5, n estimators=76;, score=0.337 total

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time=
        2.1s
[CV 4/5; 165/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184
[CV 5/5; 162/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=2, min samples split=5, n estimators=76;, score=0.359 total
time=
        2.1s
[CV 5/5; 165/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184
[CV 4/5; 164/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.378 total
time=
       2.4s
[CV 1/5; 166/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 1/5; 166/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.396 total
time=
      0.2s
[CV 2/5; 166/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 3/5; 164/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=148;, score=0.357 total
time=
       2.9s
[CV 3/5; 166/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 2/5; 166/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.404 total
time=
       0.3s
[CV 4/5; 166/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 1/5; 164/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.382 total
time=
       3.2s
[CV 5/5; 166/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 2/5; 164/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=148;, score=0.373 total
      3.2s
time=
[CV 1/5; 167/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134
[CV 5/5; 164/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.375 total
time=
      3.1s
[CV 2/5; 167/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134
[CV 3/5; 166/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.376 total
[CV 3/5; 167/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134
```

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[CV 4/5; 166/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.410 total
time=
      0.3s
[CV 4/5; 167/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=3, n estimators=134
[CV 5/5; 166/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.391 total
time= 0.3s
[CV 5/5; 167/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134
[CV 3/5; 165/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184;, score=0.367 total
time=
       2.5s
[CV 1/5; 168/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130
[CV 2/5; 165/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184;, score=0.404 total
       2.7s
[CV 2/5; 168/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=130
[CV 1/5; 165/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=8, n estimators=184;, score=0.418 total
time=
      3.0s
[CV 3/5; 168/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130
[CV 4/5; 165/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184;, score=0.391 total
time=
       2.9s
[CV 4/5; 168/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130
[CV 5/5; 165/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=184;, score=0.373 total
time=
      2.9s
[CV 5/5; 168/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=130
[CV 1/5; 168/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=130;, score=0.405 total
time=
      0.9s
[CV 1/5; 169/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 2/5; 168/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130;, score=0.414 total
      0.9s
[CV 2/5; 169/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 3/5; 168/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130;, score=0.373 total
time=
      1.1s
```

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[CV 3/5; 169/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 1/5; 167/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134;, score=0.387 total
time= 2.2s
[CV 4/5; 169/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=168
[CV 4/5; 168/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=130;, score=0.398 total
time=
      1.1s
[CV 5/5; 169/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168
[CV 2/5; 167/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134;, score=0.404 total
[CV 1/5; 170/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172
[CV 5/5; 168/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=130;, score=0.385 total
time=
      1.1s
[CV 2/5; 170/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=172
[CV 4/5; 167/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=3, n estimators=134;, score=0.365 total
time=
       2.2s
[CV 3/5; 170/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172
[CV 3/5; 167/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134;, score=0.369 total
time=
       2.2s
[CV 5/5; 167/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=134;, score=0.379 total
time=
      2.2s
[CV 4/5; 170/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=172
[CV 5/5; 170/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=172
[CV 1/5; 169/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.408 total
time=
      1.4s
[CV 1/5; 171/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 2/5; 169/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.398 total
time=
       1.3s
[CV 2/5; 171/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 4/5; 169/1000] END bootstrap=True, max depth=20, max features=sqrt,
```

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min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.397 total
time=
      1.5s
[CV 3/5; 171/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 5/5; 169/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=168;, score=0.384 total
time= 1.6s
[CV 3/5; 169/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=168;, score=0.370 total
time=
      1.6s
[CV 4/5; 171/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 5/5; 171/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 1/5; 170/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172;, score=0.404 total
time=
      1.8s
[CV 1/5; 172/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6
[CV 2/5; 170/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172;, score=0.387 total
time= 1.8s
[CV 2/5; 172/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6
[CV 3/5; 170/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172;, score=0.397 total
time=
      1.8s
[CV 3/5; 172/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6
[CV 5/5; 170/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172;, score=0.394 total
      1.8s
[CV 4/5; 172/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6
[CV 1/5; 172/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6;, score=0.390 total
time= 0.1s
[CV 5/5; 172/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6
[CV 4/5; 170/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=172;, score=0.367 total
time=
      1.8s
[CV 1/5; 173/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=84
[CV 2/5; 172/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6;, score=0.373 total
time=
      0.1s
[CV 2/5; 173/1000] START bootstrap=True, max depth=20, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=6, n_estimators=84
[CV 3/5; 172/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6;, score=0.359 total
time= 0.1s
[CV 3/5; 173/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=84
[CV 4/5; 172/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6;, score=0.381 total
time=
      0.1s
[CV 4/5; 173/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=84
[CV 5/5; 172/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=6;, score=0.363 total
time=
      0.1s
[CV 5/5; 173/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=84
[CV 2/5; 171/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=3, n estimators=76;, score=0.376 total
time=
      1.6s
[CV 1/5; 174/1000] START bootstrap=True, max depth=None, max features=None,
min samples leaf=3, min samples split=6, n estimators=86
[CV 1/5; 171/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76;, score=0.389 total
time=
      1.7s
[CV 2/5; 174/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 1/5; 173/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=84;, score=0.399 total
[CV 3/5; 174/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 2/5; 173/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=84;, score=0.406 total
time=
      0.8s
[CV 4/5; 174/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=86
[CV 3/5; 173/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=84;, score=0.378 total
time= 0.8s
[CV 5/5; 174/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 4/5; 173/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=84;, score=0.381 total
time=
      0.8s
[CV 1/5; 175/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=144
[CV 5/5; 173/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=84;, score=0.373 total
```

time= 0.8s [CV 2/5; 175/1000] START bootstrap=False, max\_depth=7, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144 [CV 4/5; 171/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=1, min samples split=3, n estimators=76;, score=0.324 total 1.9s time= [CV 3/5; 171/1000] END bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=76;, score=0.327 total 2.0s [CV 3/5; 175/1000] START bootstrap=False, max\_depth=7, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144 [CV 4/5; 175/1000] START bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144 [CV 5/5; 171/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=76;, score=0.350 total time= 2.0s [CV 5/5; 175/1000] START bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144 [CV 2/5; 174/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=6, n estimators=86;, score=0.397 total time= 1.2s [CV 1/5; 176/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=150 [CV 1/5; 174/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=86;, score=0.387 total time= 1.3s [CV 2/5; 176/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=150 [CV 1/5; 175/1000] END bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144;, score=0.406 total time= 1.1s[CV 3/5; 176/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=150 [CV 2/5; 175/1000] END bootstrap=False, max\_depth=7, max\_features=sqrt, min samples leaf=1, min samples split=8, n estimators=144;, score=0.389 total 1.1s time= [CV 4/5; 176/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=150 [CV 4/5; 174/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=86;, score=0.357 total time= 1.5s[CV 5/5; 176/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=150 [CV 5/5; 174/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=86;, score=0.382 total [CV 1/5; 177/1000] START bootstrap=False, max\_depth=12, max\_features=sqrt,

min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=24

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[CV 3/5; 174/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86;, score=0.394 total
time=
      1.6s
[CV 2/5; 177/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24
[CV 3/5; 175/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=144;, score=0.363 total
time=
      1.1s
[CV 3/5; 177/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=24
[CV 4/5; 175/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.382 total
time=
      1.1s
[CV 4/5; 177/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=24
[CV 5/5; 175/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.382 total
time= 1.1s
[CV 5/5; 177/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24
[CV 1/5; 177/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24;, score=0.418 total
time= 0.3s
[CV 1/5; 178/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66
[CV 2/5; 177/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24;, score=0.381 total
time=
       0.3s
[CV 2/5; 178/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66
[CV 3/5; 177/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=24;, score=0.362 total
time=
      0.3s
[CV 4/5; 177/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24;, score=0.388 total
time= 0.3s
[CV 3/5; 178/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66
[CV 4/5; 178/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66
[CV 5/5; 177/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=24;, score=0.381 total
      0.3s
[CV 5/5; 178/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66
[CV 1/5; 178/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=66;, score=0.424 total
time=
       0.3s
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[CV 1/5; 179/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=18
[CV 2/5; 178/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=66;, score=0.417 total
time= 0.3s
[CV 2/5; 179/1000] START bootstrap=False, max depth=18, max features=None,
min samples leaf=1, min samples split=4, n estimators=18
[CV 2/5; 176/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=150;, score=0.387 total
time=
      1.3s
[CV 3/5; 179/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=18
[CV 3/5; 178/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=66;, score=0.376 total
[CV 4/5; 179/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=18
[CV 1/5; 176/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=150;, score=0.404 total
time=
      1.4s
[CV 5/5; 179/1000] START bootstrap=False, max depth=18, max features=None,
min samples leaf=1, min samples split=4, n estimators=18
[CV 4/5; 178/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=66;, score=0.373 total
time= 0.3s
[CV 1/5; 180/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130
[CV 5/5; 178/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=66;, score=0.401 total
time=
      0.3s
[CV 2/5; 180/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130
[CV 2/5; 179/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=18;, score=0.356 total
time=
      0.4s
[CV 3/5; 180/1000] START bootstrap=True, max depth=6, max features=None,
min samples leaf=2, min samples split=9, n estimators=130
[CV 1/5; 179/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=18;, score=0.383 total
time=
      0.5s
[CV 4/5; 180/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130
[CV 4/5; 179/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.321 total
time=
       0.4s
[CV 5/5; 180/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130
[CV 3/5; 179/1000] END bootstrap=False, max_depth=18, max_features=None,
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min samples leaf=1, min samples split=4, n estimators=18;, score=0.328 total
time=
      0.5s
[CV 1/5; 181/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12
[CV 4/5; 176/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=150;, score=0.367 total
time= 1.6s
[CV 2/5; 181/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=12
[CV 3/5; 176/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=150;, score=0.397 total
       1.6s
time=
[CV 3/5; 181/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12
[CV 5/5; 179/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.359 total
time=
      0.5s
[CV 4/5; 181/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12
[CV 1/5; 181/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12;, score=0.408 total
time= 0.1s
[CV 5/5; 181/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12
[CV 2/5; 181/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=12;, score=0.385 total
time= 0.1s
[CV 1/5; 182/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96
[CV 3/5; 181/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12;, score=0.362 total
time= 0.1s
[CV 2/5; 182/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96
[CV 4/5; 181/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12;, score=0.381 total
time= 0.1s
[CV 3/5; 182/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96
[CV 5/5; 181/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=12;, score=0.397 total
      0.1s
time=
[CV 4/5; 182/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96
[CV 5/5; 176/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=150;, score=0.394 total
time=
      1.6s
```

[CV 5/5; 182/1000] START bootstrap=True, max\_depth=6, max\_features=None,

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min_samples_leaf=3, min_samples_split=6, n_estimators=96
[CV 3/5; 180/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.388 total
time= 0.9s
[CV 1/5; 183/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=96
[CV 2/5; 180/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.411 total
time=
      1.1s
[CV 2/5; 183/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 1/5; 180/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.417 total
time=
      1.1s
[CV 3/5; 183/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 5/5; 180/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.381 total
time=
      0.9s
[CV 4/5; 183/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=96
[CV 1/5; 182/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96;, score=0.424 total
time=
      0.8s
[CV 5/5; 183/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 2/5; 182/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=6, n estimators=96;, score=0.410 total
[CV 1/5; 184/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172
[CV 4/5; 180/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.384 total
time=
      1.1s
[CV 2/5; 184/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172
[CV 3/5; 182/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=96;, score=0.389 total
time= 0.8s
[CV 3/5; 184/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172
[CV 4/5; 182/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=6, n estimators=96;, score=0.381 total
time=
      0.8s
[CV 4/5; 184/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172
[CV 5/5; 182/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=6, n estimators=96;, score=0.397 total
```

```
0.8s
time=
[CV 5/5; 184/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172
[CV 1/5; 183/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=96;, score=0.412 total
time=
       0.5s
[CV 1/5; 185/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168
[CV 4/5; 183/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96;, score=0.379 total
time= 0.5s
[CV 2/5; 185/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168
[CV 2/5; 183/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96;, score=0.413 total
time=
      0.6s
[CV 3/5; 185/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168
[CV 3/5; 183/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=96;, score=0.389 total
time=
      0.7s
[CV 4/5; 185/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168
[CV 5/5; 183/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=96;, score=0.406 total
time=
       0.6s
[CV 5/5; 185/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168
[CV 1/5; 185/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168;, score=0.412 total
time=
      1.1s
[CV 1/5; 186/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=84
[CV 2/5; 185/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=168;, score=0.400 total
time= 1.0s
[CV 2/5; 186/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=84
[CV 3/5; 185/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168;, score=0.363 total
time=
      1.3s
[CV 3/5; 186/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=84
[CV 4/5; 185/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168;, score=0.382 total
[CV 4/5; 186/1000] START bootstrap=False, max_depth=12, max_features=None,
```

min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=84

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[CV 5/5; 185/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=168;, score=0.411 total
time=
      1.3s
[CV 5/5; 186/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=84
[CV 2/5; 186/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=3, min samples split=3, n estimators=84;, score=0.373 total
time=
      1.5s
[CV 1/5; 187/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166
[CV 1/5; 186/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=84;, score=0.383 total
time=
      1.7s
[CV 2/5; 187/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166
[CV 3/5; 184/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172;, score=0.359 total
      3.3s
[CV 3/5; 187/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=166
[CV 4/5; 184/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=2, min samples split=3, n estimators=172;, score=0.373 total
time=
      3.4s
[CV 4/5; 187/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166
[CV 1/5; 184/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172;, score=0.395 total
time=
       3.5s
[CV 5/5; 187/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166
[CV 3/5; 186/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=84;, score=0.357 total
time=
      1.8s
[CV 1/5; 188/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=9, n estimators=126
[CV 2/5; 184/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=2, min samples split=3, n estimators=172;, score=0.366 total
time=
       3.5s
[CV 2/5; 188/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126
[CV 4/5; 186/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=84;, score=0.378 total
[CV 3/5; 188/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126
[CV 5/5; 184/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=172;, score=0.375 total
time=
       3.5s
```

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[CV 4/5; 188/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126
[CV 5/5; 186/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=84;, score=0.375 total
time= 1.8s
[CV 5/5; 188/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=9, n estimators=126
[CV 1/5; 187/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=166;, score=0.386 total
time=
      1.0s
[CV 1/5; 189/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150
[CV 2/5; 187/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166;, score=0.410 total
[CV 2/5; 189/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150
[CV 3/5; 187/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166;, score=0.389 total
time=
      1.1s
[CV 3/5; 189/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=150
[CV 4/5; 187/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=166;, score=0.410 total
time= 1.2s
[CV 4/5; 189/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150
[CV 5/5; 187/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=166;, score=0.397 total
time=
      1.2s
[CV 5/5; 189/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150
[CV 1/5; 189/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150;, score=0.414 total
time=
      1.1s
[CV 1/5; 190/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=7, n estimators=192
[CV 2/5; 188/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126;, score=0.392 total
time=
      1.9s
[CV 2/5; 190/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192
[CV 1/5; 188/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126;, score=0.404 total
time=
        2.0s
[CV 3/5; 190/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192
[CV 3/5; 189/1000] END bootstrap=False, max depth=8, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=7, n_estimators=150;, score=0.367 total
time=
      1.1s
[CV 4/5; 190/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192
[CV 4/5; 188/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126;, score=0.394 total
time= 1.9s
[CV 5/5; 190/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=7, n estimators=192
[CV 5/5; 188/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=126;, score=0.388 total
       1.9s
time=
[CV 1/5; 191/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148
[CV 2/5; 189/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150;, score=0.407 total
time=
      1.3s
[CV 2/5; 191/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148
[CV 3/5; 188/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=9, n estimators=126;, score=0.385 total
time= 2.0s
[CV 3/5; 191/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=148
[CV 4/5; 189/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150;, score=0.384 total
time=
      1.3s
[CV 4/5; 191/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148
[CV 5/5; 189/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=150;, score=0.378 total
      1.3s
[CV 5/5; 191/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148
[CV 2/5; 191/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148;, score=0.423 total
time= 0.6s
[CV 1/5; 192/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 1/5; 191/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148;, score=0.418 total
      0.6s
time=
[CV 2/5; 192/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 3/5; 191/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148;, score=0.385 total
time=
      0.6s
[CV 3/5; 192/1000] START bootstrap=True, max depth=12, max features=sqrt,
```

```
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 4/5; 191/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148;, score=0.400 total
time= 0.6s
[CV 4/5; 192/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=66
[CV 5/5; 191/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=148;, score=0.406 total
time=
      0.6s
[CV 5/5; 192/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=66
[CV 2/5; 192/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=66;, score=0.401 total
time=
      0.5s
[CV 1/5; 192/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=66;, score=0.411 total
time=
       0.5s
[CV 1/5; 193/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 2/5; 193/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=8, n estimators=8
[CV 3/5; 192/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=66;, score=0.382 total
time=
      0.5s
[CV 3/5; 193/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 1/5; 193/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.382 total
[CV 4/5; 193/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 2/5; 193/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.401 total
time=
      0.1s
[CV 5/5; 193/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=8, n estimators=8
[CV 3/5; 193/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.392 total
time= 0.1s
[CV 1/5; 194/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58
[CV 4/5; 193/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.388 total
time=
      0.1s
[CV 2/5; 194/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58
[CV 5/5; 193/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.388 total
```

```
time=
        0.1s
[CV 3/5; 194/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58
[CV 4/5; 192/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=66;, score=0.407 total
time=
       0.5s
[CV 4/5; 194/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58
[CV 5/5; 192/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=66;, score=0.384 total
time= 0.5s
[CV 5/5; 194/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58
[CV 2/5; 194/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58;, score=0.379 total
time=
      0.7s
[CV 1/5; 195/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66
[CV 1/5; 194/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=3, n estimators=58;, score=0.401 total
time=
      0.8s
[CV 2/5; 195/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66
[CV 3/5; 194/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58;, score=0.346 total
time=
       0.8s
[CV 3/5; 195/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66
[CV 4/5; 194/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=58;, score=0.367 total
time=
      0.8s
[CV 4/5; 195/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66
[CV 5/5; 194/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=3, n estimators=58;, score=0.370 total
time= 0.8s
[CV 5/5; 195/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66
[CV 1/5; 195/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66;, score=0.396 total
time=
      1.6s
[CV 1/5; 196/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 2/5; 195/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66;, score=0.375 total
```

[CV 2/5; 196/1000] START bootstrap=False, max\_depth=16, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42

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[CV 4/5; 195/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=66;, score=0.344 total
time=
      1.5s
[CV 3/5; 196/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=6, n estimators=42
[CV 3/5; 195/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=2, n estimators=66;, score=0.341 total
time=
      1.6s
[CV 4/5; 196/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 5/5; 195/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=2, n estimators=66;, score=0.388 total
time=
      1.6s
[CV 5/5; 196/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 4/5; 190/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192;, score=0.325 total
time= 4.1s
[CV 1/5; 197/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=86
[CV 3/5; 190/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=7, n estimators=192;, score=0.329 total
time= 4.3s
[CV 2/5; 197/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=86
[CV 1/5; 190/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192;, score=0.379 total
time=
       4.9s
[CV 3/5; 197/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=86
[CV 2/5; 190/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192;, score=0.385 total
time=
      4.8s
[CV 4/5; 197/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=86
[CV 1/5; 196/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.379 total
time=
      1.1s
[CV 5/5; 197/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=86
[CV 2/5; 196/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.381 total
[CV 1/5; 198/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=90
[CV 5/5; 190/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=192;, score=0.350 total
time=
       4.9s
```

```
[CV 4/5; 196/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=42;, score=0.325 total
time=
      1.0s
[CV 2/5; 198/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=9, n estimators=90
[CV 3/5; 198/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=9, n estimators=90
[CV 3/5; 196/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.332 total
time=
      1.1s
[CV 4/5; 198/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=90
[CV 5/5; 196/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.351 total
[CV 5/5; 198/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=90
[CV 1/5; 197/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=86;, score=0.402 total
time=
      1.0s
[CV 1/5; 199/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=3, min samples split=6, n estimators=138
[CV 2/5; 197/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=86;, score=0.397 total
time= 0.9s
[CV 2/5; 199/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138
[CV 3/5; 197/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=86;, score=0.350 total
time=
      1.1s
[CV 3/5; 199/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138
[CV 4/5; 197/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=86;, score=0.400 total
time=
      1.0s
[CV 4/5; 199/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=3, min samples split=6, n estimators=138
[CV 2/5; 198/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=90;, score=0.387 total
time=
      0.8s
[CV 5/5; 199/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138
[CV 5/5; 197/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=86;, score=0.382 total
time=
       0.9s
[CV 1/5; 200/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132
[CV 1/5; 198/1000] END bootstrap=False, max depth=5, max features=None,
```

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min samples leaf=3, min samples split=9, n estimators=90;, score=0.405 total
time=
      0.9s
[CV 2/5; 200/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132
[CV 3/5; 198/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=90;, score=0.398 total
time= 0.9s
[CV 3/5; 200/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=132
[CV 4/5; 198/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=9, n estimators=90;, score=0.367 total
       1.0s
time=
[CV 4/5; 200/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=132
[CV 5/5; 198/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=9, n estimators=90;, score=0.395 total
time=
      0.9s
[CV 5/5; 200/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132
[CV 3/5; 200/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=132;, score=0.365 total
time= 1.4s
[CV 1/5; 201/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=114
[CV 2/5; 200/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132;, score=0.378 total
time=
      1.7s
[CV 2/5; 201/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 1/5; 200/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132;, score=0.409 total
      1.7s
[CV 3/5; 201/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 4/5; 200/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132;, score=0.381 total
time= 1.6s
[CV 4/5; 201/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 5/5; 200/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=132;, score=0.382 total
      1.7s
time=
[CV 5/5; 201/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 1/5; 199/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138;, score=0.382 total
time=
       2.9s
[CV 1/5; 202/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
```

```
min_samples_leaf=2, min_samples_split=2, n_estimators=136
[CV 5/5; 199/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138;, score=0.375 total
       2.4s
[CV 2/5; 202/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=136
[CV 1/5; 201/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.415 total
time=
      0.9s
[CV 3/5; 202/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=136
[CV 2/5; 199/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138;, score=0.373 total
time=
        3.1s
[CV 4/5; 202/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=136
[CV 3/5; 199/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138;, score=0.357 total
time=
      2.9s
[CV 5/5; 202/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=136
[CV 4/5; 199/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=138;, score=0.378 total
time=
       2.8s
[CV 1/5; 203/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=104
[CV 2/5; 201/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.397 total
[CV 2/5; 203/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=104
[CV 3/5; 201/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.373 total
time=
      1.1s
[CV 3/5; 203/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=104
[CV 4/5; 201/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.404 total
time= 1.0s
[CV 4/5; 203/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=104
[CV 2/5; 202/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=136;, score=0.410 total
time=
       0.6s
[CV 5/5; 203/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=104
[CV 3/5; 202/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=136;, score=0.382 total
```

0.6s time= [CV 1/5; 204/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=182 [CV 1/5; 202/1000] END bootstrap=True, max\_depth=7, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=136;, score=0.440 total time= 0.7s [CV 2/5; 204/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=182 [CV 5/5; 201/1000] END bootstrap=True, max depth=18, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=114;, score=0.378 total time= 1.1s[CV 3/5; 204/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=182 [CV 4/5; 202/1000] END bootstrap=True, max\_depth=7, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=136;, score=0.413 total time= 0.8s [CV 4/5; 204/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=182 [CV 5/5; 202/1000] END bootstrap=True, max\_depth=7, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=136;, score=0.395 total time= 0.7s[CV 5/5; 204/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=182 [CV 3/5; 203/1000] END bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=104;, score=0.360 total time= 0.8s [CV 1/5; 205/1000] START bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2 [CV 1/5; 205/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2;, score=0.380 total time= 0.1s[CV 2/5; 205/1000] START bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2 [CV 2/5; 203/1000] END bootstrap=False, max\_depth=8, max\_features=sqrt, min samples leaf=1, min samples split=3, n estimators=104;, score=0.392 total time= 0.9s[CV 3/5; 205/1000] START bootstrap=False, max depth=18, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2 [CV 5/5; 203/1000] END bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=104;, score=0.387 total time= 0.8s [CV 4/5; 205/1000] START bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2 [CV 1/5; 203/1000] END bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=104;, score=0.406 total [CV 5/5; 205/1000] START bootstrap=False, max\_depth=18, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2

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[CV 2/5; 205/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=2;, score=0.367 total
time=
      0.1s
[CV 1/5; 206/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=136
[CV 4/5; 203/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=104;, score=0.391 total
time= 0.9s
[CV 2/5; 206/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136
[CV 3/5; 205/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=2;, score=0.328 total
time=
      0.1s
[CV 3/5; 206/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136
[CV 4/5; 205/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=2;, score=0.328 total
time= 0.0s
[CV 4/5; 206/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=136
[CV 5/5; 205/1000] END bootstrap=False, max depth=18, max features=None,
min samples leaf=1, min samples split=9, n estimators=2;, score=0.363 total
time= 0.1s
[CV 5/5; 206/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136
[CV 4/5; 206/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136;, score=0.344 total
time=
      1.9s
[CV 1/5; 207/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128
[CV 2/5; 204/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=182;, score=0.408 total
time=
      2.9s
[CV 2/5; 207/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=128
[CV 1/5; 206/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=136;, score=0.377 total
time=
       2.2s
[CV 3/5; 207/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128
[CV 1/5; 204/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=182;, score=0.415 total
[CV 4/5; 207/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128
[CV 3/5; 204/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=182;, score=0.373 total
```

time=

3.0s

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[CV 5/5; 207/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128
[CV 5/5; 206/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136;, score=0.373 total
time= 2.3s
[CV 1/5; 208/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=80
[CV 2/5; 206/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=136;, score=0.366 total
time=
       2.3s
[CV 2/5; 208/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 1/5; 207/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128;, score=0.423 total
[CV 3/5; 208/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 4/5; 204/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=182;, score=0.376 total
time=
      2.9s
[CV 4/5; 208/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=80
[CV 3/5; 206/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=136;, score=0.363 total
time=
       2.5s
[CV 5/5; 208/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 5/5; 204/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=182;, score=0.376 total
time=
       2.9s
[CV 1/5; 209/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2
[CV 1/5; 209/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2;, score=0.399 total
time= 0.0s
[CV 2/5; 209/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=2
[CV 2/5; 209/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2;, score=0.398 total
time=
      0.0s
[CV 3/5; 209/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2
[CV 3/5; 209/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2;, score=0.369 total
time=
       0.0s
[CV 4/5; 209/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2
[CV 4/5; 209/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
```

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min_samples_leaf=2, min_samples_split=9, n_estimators=2;, score=0.360 total
time=
      0.0s
[CV 5/5; 209/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2
[CV 5/5; 209/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=2;, score=0.426 total
time= 0.0s
[CV 1/5; 210/1000] START bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=96
[CV 3/5; 207/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128;, score=0.388 total
       0.5s
time=
[CV 2/5; 210/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 2/5; 207/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128;, score=0.425 total
time=
      0.6s
[CV 3/5; 210/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 4/5; 207/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128;, score=0.408 total
time= 0.6s
[CV 4/5; 210/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 5/5; 207/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=128;, score=0.379 total
time=
      0.6s
[CV 5/5; 210/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 2/5; 210/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.410 total
time= 0.7s
[CV 1/5; 211/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56
[CV 1/5; 208/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80;, score=0.371 total
time= 1.1s
[CV 2/5; 211/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56
[CV 3/5; 210/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96;, score=0.365 total
      0.7s
time=
[CV 3/5; 211/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56
[CV 1/5; 210/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.415 total
time=
      0.8s
```

[CV 4/5; 211/1000] START bootstrap=True, max depth=20, max features=None,

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min_samples_leaf=3, min_samples_split=2, n_estimators=56
[CV 2/5; 208/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=80;, score=0.370 total
      1.2s
[CV 5/5; 211/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=3, min samples split=2, n estimators=56
[CV 4/5; 210/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=96;, score=0.388 total
time=
      0.8s
[CV 1/5; 212/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62
[CV 5/5; 210/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.373 total
time=
      0.8s
[CV 2/5; 212/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62
[CV 3/5; 208/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=80;, score=0.353 total
time=
      1.3s
[CV 3/5; 212/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=62
[CV 4/5; 208/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80;, score=0.351 total
time=
      1.2s
[CV 4/5; 212/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62
[CV 5/5; 208/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=80;, score=0.366 total
[CV 5/5; 212/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62
[CV 2/5; 212/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=62;, score=0.417 total
time=
      0.4s
[CV 1/5; 213/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=110
[CV 1/5; 212/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62;, score=0.390 total
time= 0.5s
[CV 2/5; 213/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110
[CV 3/5; 212/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=62;, score=0.385 total
time=
      0.5s
[CV 3/5; 213/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110
[CV 4/5; 212/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=62;, score=0.407 total
```

```
0.5s
time=
[CV 4/5; 213/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110
[CV 2/5; 211/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=3, min samples split=2, n estimators=56;, score=0.397 total
time=
       0.8s
[CV 5/5; 213/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110
[CV 5/5; 212/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=62;, score=0.406 total
time= 0.5s
[CV 1/5; 214/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132
[CV 1/5; 211/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56;, score=0.385 total
time= 0.9s
[CV 2/5; 214/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132
[CV 4/5; 211/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=3, min samples split=2, n estimators=56;, score=0.367 total
time=
      0.9s
[CV 3/5; 214/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132
[CV 3/5; 211/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56;, score=0.379 total
time=
       1.0s
[CV 4/5; 214/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132
[CV 5/5; 211/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=56;, score=0.385 total
time=
      0.9s
[CV 1/5; 213/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110;, score=0.405 total
time=
      0.4s
[CV 5/5; 214/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=132
[CV 1/5; 215/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 1/5; 215/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.406 total
time=
      0.1s
[CV 2/5; 213/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110;, score=0.425 total
time=
      0.5s
[CV 2/5; 215/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 3/5; 215/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
```

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[CV 5/5; 213/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110;, score=0.410 total
time=
      0.4s
[CV 4/5; 215/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10
[CV 2/5; 215/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.378 total
time= 0.1s
[CV 3/5; 215/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.381 total
time= 0.1s
[CV 5/5; 215/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 1/5; 216/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 3/5; 213/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110;, score=0.388 total
time= 0.5s
[CV 2/5; 216/1000] START bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=7, n estimators=108
[CV 4/5; 215/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.373 total
time= 0.1s
[CV 3/5; 216/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 4/5; 213/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=110;, score=0.389 total
time=
      0.5s
[CV 4/5; 216/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 5/5; 215/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.385 total
time=
      0.1s
[CV 5/5; 216/1000] START bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=7, n estimators=108
[CV 1/5; 216/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=7, n estimators=108;, score=0.368 total
time=
      1.5s
[CV 1/5; 217/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=58
[CV 3/5; 216/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.346 total
[CV 2/5; 217/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=58
[CV 1/5; 214/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132;, score=0.374 total
time=
       2.0s
```

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[CV 3/5; 217/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=58
[CV 2/5; 214/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132;, score=0.376 total
time= 2.1s
[CV 4/5; 217/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=8, n estimators=58
[CV 4/5; 214/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=132;, score=0.356 total
time=
       2.0s
[CV 5/5; 217/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=58
[CV 3/5; 214/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132;, score=0.350 total
[CV 1/5; 218/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6
[CV 2/5; 216/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.365 total
time=
      1.9s
[CV 2/5; 218/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=6
[CV 5/5; 214/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=132;, score=0.366 total
time= 2.0s
[CV 3/5; 218/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6
[CV 5/5; 216/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.365 total
time=
      1.8s
[CV 4/5; 218/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6
[CV 1/5; 218/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6;, score=0.421 total
time=
      0.1s
[CV 5/5; 218/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=6
[CV 2/5; 218/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6;, score=0.394 total
time=
      0.1s
[CV 1/5; 219/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 3/5; 218/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6;, score=0.391 total
time=
       0.1s
[CV 2/5; 219/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 4/5; 216/1000] END bootstrap=False, max depth=9, max features=None,
```

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min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.354 total
time=
      1.9s
[CV 3/5; 219/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 4/5; 218/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6;, score=0.394 total
time= 0.1s
[CV 4/5; 219/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=8
[CV 1/5; 219/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.376 total
time=
       0.1s
[CV 5/5; 219/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 5/5; 218/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=6;, score=0.346 total
time=
      0.1s
[CV 1/5; 220/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 2/5; 219/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.369 total
time= 0.1s
[CV 2/5; 220/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 3/5; 219/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.384 total
time=
      0.1s
[CV 3/5; 220/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 5/5; 219/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.379 total
time= 0.1s
[CV 4/5; 220/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 4/5; 219/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.376 total
time= 0.1s
[CV 5/5; 220/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=84
[CV 1/5; 217/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=58;, score=0.415 total
      0.8s
time=
[CV 1/5; 221/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=168
[CV 2/5; 217/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=8, n estimators=58;, score=0.381 total
time=
      0.8s
```

[CV 2/5; 221/1000] START bootstrap=False, max\_depth=17, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=168 [CV 3/5; 217/1000] END bootstrap=True, max depth=13, max features=None, min samples leaf=1, min samples split=8, n estimators=58;, score=0.379 total time= 0.8s[CV 3/5; 221/1000] START bootstrap=False, max depth=17, max features=None, min samples leaf=1, min samples split=8, n estimators=168 [CV 1/5; 220/1000] END bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=84;, score=0.408 total time= 0.5s[CV 4/5; 221/1000] START bootstrap=False, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=168 [CV 4/5; 217/1000] END bootstrap=True, max depth=13, max features=None, min samples leaf=1, min samples split=8, n estimators=58;, score=0.391 total time= 0.8s [CV 5/5; 221/1000] START bootstrap=False, max\_depth=17, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=168 [CV 2/5; 220/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min samples leaf=3, min samples split=9, n estimators=84;, score=0.394 total time= 0.6s [CV 1/5; 222/1000] START bootstrap=False, max depth=12, max features=None, min samples leaf=2, min samples split=9, n estimators=130 [CV 3/5; 220/1000] END bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=84;, score=0.350 total time= 0.5s [CV 2/5; 222/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130 [CV 5/5; 217/1000] END bootstrap=True, max depth=13, max features=None, min samples leaf=1, min samples split=8, n estimators=58;, score=0.379 total [CV 3/5; 222/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130 [CV 4/5; 220/1000] END bootstrap=False, max depth=6, max features=sqrt, min samples leaf=3, min samples split=9, n estimators=84;, score=0.373 total time= 0.6s [CV 4/5; 222/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130 [CV 5/5; 220/1000] END bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=84;, score=0.407 total time= 0.6s [CV 5/5; 222/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130 [CV 4/5; 222/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130;, score=0.369 total time= 2.7s[CV 1/5; 223/1000] START bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=198 [CV 1/5; 222/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=130;, score=0.385 total

```
time=
        2.8s
[CV 2/5; 223/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198
[CV 2/5; 222/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=9, n estimators=130;, score=0.379 total
        2.8s
time=
[CV 3/5; 223/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198
[CV 5/5; 222/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.365 total
time=
       2.7s
[CV 4/5; 223/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198
[CV 3/5; 222/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=130;, score=0.356 total
time=
      2.8s
[CV 5/5; 223/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198
[CV 4/5; 221/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=8, n estimators=168;, score=0.340 total
time=
      3.5s
[CV 1/5; 224/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126
[CV 3/5; 221/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=168;, score=0.335 total
time=
       3.7s
[CV 2/5; 224/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126
[CV 1/5; 224/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.420 total
time=
      0.6s
[CV 3/5; 224/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126
[CV 2/5; 224/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=126;, score=0.416 total
time= 0.6s
[CV 4/5; 224/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126
[CV 1/5; 221/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=168;, score=0.380 total
time=
      4.6s
[CV 5/5; 224/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126
[CV 5/5; 221/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=168;, score=0.353 total
[CV 1/5; 225/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
```

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[CV 2/5; 221/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=168;, score=0.379 total
time=
      4.8s
[CV 2/5; 225/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=2, min samples split=5, n estimators=198
[CV 3/5; 224/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=126;, score=0.408 total
time= 0.6s
[CV 3/5; 225/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 1/5; 223/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198;, score=0.411 total
time=
       2.0s
[CV 4/5; 225/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 3/5; 223/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198;, score=0.375 total
       2.0s
[CV 4/5; 223/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=198;, score=0.387 total
      2.0s
[CV 5/5; 225/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 1/5; 226/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 2/5; 223/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=198;, score=0.376 total
time=
       2.0s
[CV 2/5; 226/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 4/5; 224/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.422 total
time=
      0.7s
[CV 5/5; 223/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=198;, score=0.387 total
      2.0s
time=
[CV 3/5; 226/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38
[CV 4/5; 226/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 5/5; 224/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.397 total
      0.8s
[CV 5/5; 226/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 2/5; 226/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38;, score=0.429 total
time=
       0.3s
```

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[CV 1/5; 227/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 1/5; 226/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38;, score=0.409 total
time= 0.4s
[CV 2/5; 227/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=146
[CV 3/5; 226/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.385 total
time=
      0.3s
[CV 4/5; 226/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.408 total
time=
      0.3s
[CV 3/5; 227/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 4/5; 227/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146
[CV 5/5; 226/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38;, score=0.398 total
time=
      0.4s
[CV 5/5; 227/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=146
[CV 1/5; 227/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=146;, score=0.405 total
time= 1.0s
[CV 1/5; 228/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=94
[CV 2/5; 227/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.414 total
time=
      1.0s
[CV 2/5; 228/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=94
[CV 4/5; 227/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.400 total
time=
      1.0s
[CV 3/5; 228/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=2, n estimators=94
[CV 3/5; 227/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.391 total
time=
      1.0s
[CV 4/5; 228/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=94
[CV 5/5; 227/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=146;, score=0.398 total
time=
       1.0s
[CV 5/5; 228/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=94
[CV 1/5; 228/1000] END bootstrap=True, max depth=12, max features=None,
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min samples leaf=3, min samples split=2, n estimators=94;, score=0.398 total
time=
      1.3s
[CV 1/5; 229/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82
[CV 2/5; 225/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.407 total
time= 2.9s
[CV 2/5; 229/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=82
[CV 2/5; 228/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=2, n estimators=94;, score=0.400 total
time=
       1.3s
[CV 3/5; 229/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82
[CV 3/5; 228/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=2, n estimators=94;, score=0.394 total
time=
      1.3s
[CV 4/5; 229/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82
[CV 4/5; 228/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=2, n estimators=94;, score=0.392 total
time= 1.3s
[CV 5/5; 229/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82
[CV 3/5; 225/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.372 total
time=
      2.9s
[CV 1/5; 230/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42
[CV 5/5; 228/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=2, n estimators=94;, score=0.384 total
      1.3s
[CV 2/5; 230/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42
[CV 1/5; 230/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42;, score=0.401 total
time= 0.3s
[CV 3/5; 230/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42
[CV 3/5; 229/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82;, score=0.407 total
      0.5s
time=
[CV 4/5; 230/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42
[CV 2/5; 229/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=82;, score=0.417 total
time=
       0.5s
```

[CV 5/5; 230/1000] START bootstrap=True, max depth=15, max features=sqrt,

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min_samples_leaf=2, min_samples_split=5, n_estimators=42
[CV 1/5; 229/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=82;, score=0.414 total
time= 0.5s
[CV 1/5; 231/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=3, min samples split=7, n estimators=110
[CV 4/5; 229/1000] END bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=82;, score=0.391 total
time=
      0.5s
[CV 2/5; 231/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110
[CV 5/5; 229/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=82;, score=0.384 total
time=
      0.5s
[CV 3/5; 231/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110
[CV 2/5; 230/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=42;, score=0.406 total
time=
      0.4s
[CV 1/5; 225/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.393 total
time=
       3.6s
[CV 4/5; 231/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110
[CV 5/5; 231/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110
[CV 4/5; 225/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.365 total
[CV 1/5; 232/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=70
[CV 5/5; 225/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.379 total
time=
       3.3s
[CV 2/5; 232/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=70
[CV 3/5; 230/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42;, score=0.389 total
time= 0.3s
[CV 3/5; 232/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=70
[CV 4/5; 230/1000] END bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=42;, score=0.397 total
time=
      0.3s
[CV 4/5; 232/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=70
[CV 5/5; 230/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=42;, score=0.392 total
```

- time= 0.4s
- [CV 5/5; 232/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70
- [CV 4/5; 232/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70;, score=0.373 total time= 0.9s
- [CV 1/5; 233/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54
- [CV 3/5; 232/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70;, score=0.363 total time= 1.0s
- [CV 2/5; 233/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54
- [CV 2/5; 232/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70;, score=0.385 total time= 1.2s
- [CV 3/5; 233/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54
- [CV 5/5; 232/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70;, score=0.370 total time= 1.1s
- [CV 4/5; 233/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54
- [CV 1/5; 232/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=70;, score=0.367 total time= 1.3s
- [CV 5/5; 233/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54
- [CV 2/5; 233/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54;, score=0.406 total time= 0.9s
- [CV 1/5; 234/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=112
- [CV 1/5; 233/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=54;, score=0.392 total time= 0.9s
- [CV 2/5; 234/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=112
- [CV 1/5; 231/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=110;, score=0.377 total time= 2.3s
- [CV 3/5; 234/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=112
- [CV 3/5; 231/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=110;, score=0.359 total time= 2.3s
- [CV 4/5; 234/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=112

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[CV 2/5; 231/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110;, score=0.373 total
time=
       2.3s
[CV 5/5; 234/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=5, n estimators=112
[CV 3/5; 233/1000] END bootstrap=True, max depth=None, max features=None,
min samples leaf=2, min samples split=9, n estimators=54;, score=0.379 total
time= 1.0s
[CV 1/5; 235/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 4/5; 231/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110;, score=0.378 total
time=
       2.2s
[CV 2/5; 235/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 4/5; 233/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=54;, score=0.372 total
time= 0.9s
[CV 3/5; 235/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=2, n estimators=102
[CV 5/5; 233/1000] END bootstrap=True, max depth=None, max features=None,
min samples leaf=2, min samples split=9, n estimators=54;, score=0.379 total
time= 0.9s
[CV 4/5; 235/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 5/5; 231/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=110;, score=0.376 total
time=
       2.5s
[CV 5/5; 235/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 1/5; 235/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.408 total
time=
      1.5s
[CV 1/5; 236/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=80
[CV 1/5; 234/1000] END bootstrap=True, max depth=None, max features=None,
min samples leaf=1, min samples split=5, n estimators=112;, score=0.387 total
time=
      1.8s
[CV 2/5; 236/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=80
[CV 2/5; 235/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.395 total
[CV 3/5; 236/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=80
[CV 4/5; 235/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.388 total
```

time=

1.6s

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[CV 4/5; 236/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=80
[CV 3/5; 235/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.376 total
time= 1.7s
[CV 5/5; 236/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=80
[CV 2/5; 234/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=5, n estimators=112;, score=0.419 total
time=
       2.1s
[CV 1/5; 237/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=80
[CV 5/5; 235/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.375 total
[CV 2/5; 237/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=80
[CV 4/5; 234/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.378 total
time=
      1.9s
[CV 3/5; 237/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=80
[CV 5/5; 234/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.372 total
time=
       2.0s
[CV 4/5; 237/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=80
[CV 1/5; 236/1000] END bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=80;, score=0.404 total
time=
      0.6s
[CV 5/5; 237/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=80
[CV 3/5; 234/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.382 total
time=
      2.2s
[CV 1/5; 238/1000] START bootstrap=False, max depth=15, max features=None,
min samples leaf=2, min samples split=5, n estimators=98
[CV 2/5; 236/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=80;, score=0.388 total
time=
      0.6s
[CV 2/5; 238/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=98
[CV 3/5; 236/1000] END bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=80;, score=0.366 total
time=
       0.7s
[CV 3/5; 238/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=98
[CV 4/5; 236/1000] END bootstrap=True, max depth=15, max features=sqrt,
```

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min samples leaf=2, min samples split=6, n estimators=80;, score=0.389 total
time=
      0.7s
[CV 4/5; 238/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=98
[CV 5/5; 236/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=80;, score=0.370 total
time= 0.7s
[CV 5/5; 238/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=98
[CV 2/5; 237/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=80;, score=0.387 total
time=
       0.8s
[CV 1/5; 239/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18
[CV 3/5; 237/1000] END bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=80;, score=0.375 total
time=
      0.8s
[CV 2/5; 239/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18
[CV 1/5; 237/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=80;, score=0.396 total
time= 0.9s
[CV 3/5; 239/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18
[CV 4/5; 237/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=80;, score=0.379 total
time= 0.8s
[CV 4/5; 239/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18
[CV 5/5; 237/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=80;, score=0.381 total
time= 0.8s
[CV 5/5; 239/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18
[CV 1/5; 239/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18;, score=0.380 total
time= 0.4s
[CV 1/5; 240/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 2/5; 239/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18;, score=0.382 total
      0.5s
time=
[CV 2/5; 240/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 3/5; 239/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=18;, score=0.327 total
time=
       0.5s
```

[CV 3/5; 240/1000] START bootstrap=True, max\_depth=7, max\_features=None,

```
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 4/5; 239/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=18;, score=0.340 total
time= 0.4s
[CV 4/5; 240/1000] START bootstrap=True, max depth=7, max features=None,
min samples leaf=2, min samples split=3, n estimators=120
[CV 5/5; 239/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=18;, score=0.354 total
time=
      0.5s
[CV 5/5; 240/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 1/5; 240/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.415 total
time=
      0.9s
[CV 1/5; 241/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=92
[CV 2/5; 238/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=98;, score=0.363 total
time=
      2.0s
[CV 2/5; 241/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=92
[CV 2/5; 240/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.391 total
time=
      1.1s
[CV 3/5; 241/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=92
[CV 3/5; 240/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.398 total
[CV 4/5; 241/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=92
[CV 4/5; 240/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.392 total
time=
      1.1s
[CV 5/5; 241/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=92
[CV 5/5; 240/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.395 total
time= 1.1s
[CV 1/5; 242/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 1/5; 241/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=92;, score=0.408 total
time=
      0.5s
[CV 2/5; 242/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 1/5; 238/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=98;, score=0.401 total
```

time= 2.4s[CV 3/5; 242/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=150 [CV 2/5; 241/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=92;, score=0.408 total time= 0.5s [CV 4/5; 242/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=150 [CV 4/5; 238/1000] END bootstrap=False, max depth=15, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=98;, score=0.350 total time= 2.3s [CV 5/5; 242/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=150 [CV 3/5; 238/1000] END bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=98;, score=0.337 total time= 2.4s[CV 1/5; 243/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36 [CV 5/5; 238/1000] END bootstrap=False, max\_depth=15, max\_features=None, min samples leaf=2, min samples split=5, n estimators=98;, score=0.373 total time= 2.4s[CV 2/5; 243/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36 [CV 3/5; 241/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=92;, score=0.388 total time= 0.6s [CV 3/5; 243/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36 [CV 4/5; 241/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=92;, score=0.378 total time= 0.6s [CV 4/5; 243/1000] START bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36 [CV 5/5; 241/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=92;, score=0.397 total time= 0.6s[CV 5/5; 243/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36 [CV 1/5; 243/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36;, score=0.417 total time= 0.3s [CV 1/5; 244/1000] START bootstrap=True, max depth=18, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=196 [CV 2/5; 243/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=36;, score=0.401 total [CV 2/5; 244/1000] START bootstrap=True, max\_depth=18, max\_features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=196

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[CV 3/5; 243/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=36;, score=0.392 total
time=
      0.3s
[CV 3/5; 244/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196
[CV 4/5; 243/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=36;, score=0.404 total
time= 0.3s
[CV 4/5; 244/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196
[CV 5/5; 243/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=36;, score=0.403 total
time=
      0.3s
[CV 5/5; 244/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196
[CV 2/5; 242/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=150;, score=0.400 total
       2.0s
[CV 1/5; 245/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=188
[CV 4/5; 242/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=3, n estimators=150;, score=0.376 total
time= 2.0s
[CV 2/5; 245/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188
[CV 1/5; 244/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.404 total
time=
      1.9s
[CV 3/5; 245/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188
[CV 2/5; 244/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.406 total
time=
      1.8s
[CV 4/5; 245/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=188
[CV 1/5; 242/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=3, n estimators=150;, score=0.393 total
time=
       2.5s
[CV 4/5; 244/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.385 total
time=
      1.8s
[CV 5/5; 245/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188
[CV 1/5; 246/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126
[CV 3/5; 244/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.379 total
time=
      1.9s
```

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[CV 2/5; 246/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126
[CV 5/5; 244/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.381 total
time= 1.8s
[CV 3/5; 246/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=126
[CV 3/5; 242/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=3, n estimators=150;, score=0.378 total
time=
       2.5s
[CV 4/5; 246/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126
[CV 5/5; 242/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=150;, score=0.389 total
[CV 5/5; 246/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126
[CV 2/5; 246/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126;, score=0.408 total
time=
      1.2s
[CV 1/5; 247/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=2, min samples split=8, n estimators=48
[CV 3/5; 246/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=126;, score=0.379 total
time= 1.2s
[CV 2/5; 247/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 1/5; 245/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188;, score=0.383 total
time=
      1.7s
[CV 3/5; 247/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 1/5; 246/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126;, score=0.408 total
time=
      1.2s
[CV 4/5; 247/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=2, min samples split=8, n estimators=48
[CV 4/5; 246/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126;, score=0.381 total
time=
      1.1s
[CV 5/5; 247/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48
[CV 5/5; 246/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=126;, score=0.370 total
time=
       1.2s
[CV 1/5; 248/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=78
[CV 2/5; 245/1000] END bootstrap=True, max depth=17, max features=sqrt,
```

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min_samples_leaf=1, min_samples_split=4, n_estimators=188;, score=0.410 total
time=
      1.7s
[CV 2/5; 248/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=78
[CV 3/5; 245/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188;, score=0.388 total
time= 1.6s
[CV 3/5; 248/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=78
[CV 4/5; 245/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188;, score=0.384 total
time=
       1.6s
[CV 4/5; 248/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=78
[CV 5/5; 245/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=188;, score=0.392 total
time=
      1.8s
[CV 5/5; 248/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=78
[CV 3/5; 247/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.376 total
time= 0.6s
[CV 1/5; 249/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16
[CV 1/5; 247/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=2, min samples split=8, n estimators=48;, score=0.412 total
time=
      0.7s
[CV 2/5; 249/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16
[CV 2/5; 247/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=2, min samples split=8, n estimators=48;, score=0.401 total
      0.7s
[CV 3/5; 249/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16
[CV 4/5; 247/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.388 total
time= 0.7s
[CV 4/5; 249/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16
[CV 5/5; 247/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=48;, score=0.370 total
      0.7s
time=
[CV 5/5; 249/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16
[CV 1/5; 249/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=16;, score=0.395 total
time=
      0.2s
[CV 1/5; 250/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
```

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min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 1/5; 248/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=78;, score=0.406 total
time= 0.8s
[CV 2/5; 250/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=44
[CV 2/5; 249/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16;, score=0.397 total
time=
      0.2s
[CV 3/5; 250/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 3/5; 249/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=16;, score=0.341 total
time=
       0.2s
[CV 4/5; 250/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 4/5; 249/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=16;, score=0.367 total
time=
      0.2s
[CV 5/5; 250/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=44
[CV 5/5; 249/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=16;, score=0.369 total
time=
      0.2s
[CV 1/5; 251/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 4/5; 248/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=78;, score=0.382 total
       0.7s
[CV 2/5; 251/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 2/5; 248/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=78;, score=0.372 total
time=
      0.8s
[CV 3/5; 251/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=7, n estimators=24
[CV 3/5; 248/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=78;, score=0.365 total
time= 0.8s
[CV 4/5; 251/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 1/5; 250/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=44;, score=0.408 total
time=
      0.4s
[CV 5/5; 251/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 1/5; 251/1000] END bootstrap=True, max_depth=11, max_features=None,
```

min samples leaf=2, min samples split=7, n estimators=24;, score=0.408 total

0.3stime= [CV 1/5; 252/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=172 [CV 2/5; 251/1000] END bootstrap=True, max\_depth=11, max\_features=None, min samples leaf=2, min samples split=7, n estimators=24;, score=0.411 total time= 0.3s [CV 2/5; 252/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=172 [CV 2/5; 250/1000] END bootstrap=False, max depth=10, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=44;, score=0.394 total time= 0.4s[CV 3/5; 252/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=172 [CV 5/5; 248/1000] END bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=78;, score=0.363 total time= 0.8s [CV 4/5; 252/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=172 [CV 3/5; 251/1000] END bootstrap=True, max\_depth=11, max\_features=None, min samples leaf=2, min samples split=7, n estimators=24;, score=0.384 total time= 0.3s [CV 5/5; 252/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=172 [CV 5/5; 250/1000] END bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=44;, score=0.381 total time= 0.4s[CV 1/5; 253/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=126 [CV 3/5; 250/1000] END bootstrap=False, max\_depth=10, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=44;, score=0.370 total time= 0.5s[CV 2/5; 253/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=126 [CV 4/5; 250/1000] END bootstrap=False, max\_depth=10, max\_features=sqrt, min samples leaf=3, min samples split=5, n estimators=44;, score=0.384 total time= 0.5s[CV 3/5; 253/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=126 [CV 4/5; 251/1000] END bootstrap=True, max\_depth=11, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=24;, score=0.406 total time= 0.4s[CV 4/5; 253/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=126 [CV 5/5; 251/1000] END bootstrap=True, max depth=11, max features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=24;, score=0.401 total [CV 5/5; 253/1000] START bootstrap=False, max\_depth=6, max\_features=None,

min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=126

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[CV 4/5; 253/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=126;, score=0.370 total
time=
      1.2s
[CV 1/5; 254/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=6, n estimators=46
[CV 1/5; 253/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=126;, score=0.395 total
time=
      1.5s
[CV 2/5; 254/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 2/5; 253/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=126;, score=0.385 total
time=
      1.5s
[CV 3/5; 254/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 3/5; 253/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=126;, score=0.334 total
time= 1.5s
[CV 4/5; 254/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=6, n estimators=46
[CV 5/5; 253/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=126;, score=0.387 total
time=
      1.5s
[CV 5/5; 254/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46
[CV 1/5; 254/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.371 total
time=
      0.6s
[CV 1/5; 255/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138
[CV 2/5; 254/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46;, score=0.370 total
time=
      0.7s
[CV 2/5; 255/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=7, n estimators=138
[CV 2/5; 252/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=4, n estimators=172;, score=0.395 total
time=
       2.4s
[CV 3/5; 255/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138
[CV 4/5; 254/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=6, n estimators=46;, score=0.356 total
      0.7s
[CV 4/5; 255/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138
[CV 3/5; 254/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46;, score=0.351 total
```

time=

0.8s

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[CV 5/5; 255/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138
[CV 5/5; 254/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=46;, score=0.369 total
time= 0.8s
[CV 1/5; 256/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=98
[CV 4/5; 252/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=4, n estimators=172;, score=0.378 total
time=
       2.5s
[CV 2/5; 256/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98
[CV 1/5; 252/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=172;, score=0.399 total
[CV 3/5; 256/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98
[CV 5/5; 252/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=172;, score=0.384 total
time=
       2.7s
[CV 3/5; 252/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=4, n estimators=172;, score=0.375 total
      2.7s
[CV 4/5; 256/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98
[CV 5/5; 256/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98
[CV 1/5; 256/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=98;, score=0.420 total
time=
      0.9s
[CV 1/5; 257/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60
[CV 2/5; 256/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98;, score=0.394 total
time=
      0.9s
[CV 2/5; 257/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=60
[CV 3/5; 256/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=98;, score=0.370 total
time=
      0.9s
[CV 3/5; 257/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60
[CV 4/5; 256/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=98;, score=0.404 total
time=
      0.9s
[CV 4/5; 257/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60
[CV 5/5; 256/1000] END bootstrap=True, max depth=18, max features=sqrt,
```

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min samples leaf=2, min samples split=7, n estimators=98;, score=0.388 total
time=
      0.9s
[CV 5/5; 257/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60
[CV 1/5; 255/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138;, score=0.371 total
time= 1.9s
[CV 1/5; 258/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=174
[CV 3/5; 255/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138;, score=0.351 total
       2.0s
time=
[CV 2/5; 258/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174
[CV 1/5; 257/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=60;, score=0.387 total
time=
      1.1s
[CV 3/5; 258/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174
[CV 2/5; 255/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138;, score=0.373 total
time=
       2.2s
[CV 4/5; 258/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=174
[CV 4/5; 255/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138;, score=0.356 total
time=
      2.1s
[CV 5/5; 258/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174
[CV 2/5; 257/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60;, score=0.362 total
      1.1s
[CV 1/5; 259/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 5/5; 255/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=138;, score=0.367 total
time= 2.2s
[CV 2/5; 259/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 4/5; 257/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=60;, score=0.350 total
time=
      1.1s
[CV 3/5; 259/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 3/5; 257/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=60;, score=0.332 total
time=
      1.1s
[CV 4/5; 259/1000] START bootstrap=False, max_depth=16, max_features=None,
```

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min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 5/5; 257/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=60;, score=0.360 total
time= 1.1s
[CV 5/5; 259/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=7, n estimators=88
[CV 1/5; 258/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174;, score=0.398 total
time=
      1.2s
[CV 1/5; 260/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=76
[CV 1/5; 260/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=76;, score=0.412 total
time=
       0.6s
[CV 2/5; 260/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=76
[CV 2/5; 258/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174;, score=0.420 total
time=
      1.3s
[CV 3/5; 260/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=76
[CV 4/5; 258/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174;, score=0.400 total
time=
      1.3s
[CV 4/5; 260/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=76
[CV 3/5; 258/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174;, score=0.389 total
[CV 5/5; 260/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=76
[CV 5/5; 258/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=174;, score=0.387 total
time=
      1.3s
[CV 1/5; 261/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=120
[CV 2/5; 260/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=76;, score=0.392 total
time= 0.6s
[CV 2/5; 261/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=120
[CV 3/5; 260/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=76;, score=0.369 total
time=
      0.7s
[CV 3/5; 261/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=120
[CV 4/5; 260/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=76;, score=0.379 total
```

0.7stime= [CV 4/5; 261/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=120 [CV 5/5; 260/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=76;, score=0.391 total time= 0.7s [CV 5/5; 261/1000] START bootstrap=False, max depth=20, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=120 [CV 2/5; 259/1000] END bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=88;, score=0.385 total time= 1.9s [CV 1/5; 262/1000] START bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178 [CV 4/5; 259/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=88;, score=0.325 total time= 2.2s [CV 2/5; 262/1000] START bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178 [CV 1/5; 259/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=1, min samples split=7, n estimators=88;, score=0.379 total time= 2.4s[CV 3/5; 262/1000] START bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178 [CV 5/5; 259/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=88;, score=0.350 total time= 2.3s [CV 4/5; 262/1000] START bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178 [CV 3/5; 259/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=88;, score=0.331 total time= 2.3s [CV 5/5; 262/1000] START bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178 [CV 1/5; 262/1000] END bootstrap=False, max\_depth=8, max\_features=sqrt, min samples leaf=3, min samples split=6, n estimators=178;, score=0.409 total time= 1.5s [CV 1/5; 263/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=114 [CV 3/5; 262/1000] END bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178;, score=0.367 total time= 1.3s [CV 2/5; 263/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=114 [CV 2/5; 262/1000] END bootstrap=False, max depth=8, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=178;, score=0.395 total [CV 3/5; 263/1000] START bootstrap=False, max\_depth=7, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=114

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[CV 4/5; 262/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=178;, score=0.384 total
time=
      1.5s
[CV 4/5; 263/1000] START bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=2, n estimators=114
[CV 5/5; 262/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=178;, score=0.387 total
time=
      1.5s
[CV 5/5; 263/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114
[CV 2/5; 261/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=120;, score=0.372 total
time=
       2.9s
[CV 1/5; 264/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 1/5; 261/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=120;, score=0.368 total
time= 3.4s
[CV 2/5; 264/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=8, n estimators=146
[CV 4/5; 261/1000] END bootstrap=False, max depth=20, max features=None,
min samples leaf=3, min samples split=9, n estimators=120;, score=0.321 total
time= 3.1s
[CV 3/5; 264/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 1/5; 263/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114;, score=0.399 total
time=
      1.6s
[CV 4/5; 264/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 2/5; 263/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114;, score=0.379 total
time=
      1.4s
[CV 5/5; 264/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=8, n estimators=146
[CV 3/5; 261/1000] END bootstrap=False, max depth=20, max features=None,
min samples leaf=3, min samples split=9, n estimators=120;, score=0.321 total
time=
       3.4s
[CV 1/5; 265/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8
[CV 1/5; 265/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8;, score=0.392 total
      0.0s
[CV 2/5; 265/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8
[CV 2/5; 265/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8;, score=0.392 total
time=
       0.0s
```

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[CV 3/5; 265/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8
[CV 3/5; 265/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8;, score=0.411 total
time= 0.0s
[CV 4/5; 265/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=8
[CV 5/5; 261/1000] END bootstrap=False, max depth=20, max features=None,
min samples leaf=3, min samples split=9, n estimators=120;, score=0.357 total
time=
      3.4s
[CV 5/5; 265/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8
[CV 4/5; 265/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8;, score=0.407 total
[CV 1/5; 266/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108
[CV 5/5; 265/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=8;, score=0.382 total
time=
      0.0s
[CV 2/5; 266/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=108
[CV 3/5; 263/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114;, score=0.346 total
time= 1.6s
[CV 3/5; 266/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108
[CV 4/5; 263/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114;, score=0.367 total
time=
      1.6s
[CV 4/5; 266/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108
[CV 5/5; 263/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=114;, score=0.370 total
time=
      1.6s
[CV 5/5; 266/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=108
[CV 1/5; 266/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108;, score=0.402 total
time=
      0.8s
[CV 1/5; 267/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 1/5; 264/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.398 total
time=
       1.7s
[CV 2/5; 267/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 2/5; 266/1000] END bootstrap=True, max depth=15, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=2, n_estimators=108;, score=0.414 total
time=
      0.9s
[CV 3/5; 267/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 3/5; 266/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108;, score=0.378 total
time= 0.9s
[CV 4/5; 267/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=150
[CV 4/5; 266/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108;, score=0.406 total
       0.9s
time=
[CV 5/5; 267/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 5/5; 266/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=108;, score=0.381 total
time=
      1.0s
[CV 1/5; 268/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 2/5; 264/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.411 total
time= 1.9s
[CV 2/5; 268/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=2, min samples split=4, n estimators=182
[CV 3/5; 264/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.389 total
time=
      2.0s
[CV 4/5; 264/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.410 total
time=
      1.9s
[CV 3/5; 268/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 4/5; 268/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 5/5; 264/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.392 total
time=
       2.0s
[CV 5/5; 268/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 2/5; 267/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.397 total
      1.1s
time=
[CV 1/5; 269/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 1/5; 267/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.405 total
time=
      1.1s
```

[CV 2/5; 269/1000] START bootstrap=False, max\_depth=14, max\_features=None,

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min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 3/5; 267/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.363 total
      1.3s
[CV 3/5; 269/1000] START bootstrap=False, max depth=14, max features=None,
min samples leaf=3, min samples split=6, n estimators=86
[CV 4/5; 267/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.389 total
time=
      1.3s
[CV 4/5; 269/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 5/5; 267/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.394 total
time=
       1.3s
[CV 5/5; 269/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86
[CV 1/5; 269/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=6, n estimators=86;, score=0.383 total
time=
      1.6s
[CV 1/5; 270/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=3, min samples split=6, n estimators=74
[CV 2/5; 269/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=86;, score=0.372 total
time=
       2.0s
[CV 2/5; 270/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74
[CV 4/5; 269/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=6, n estimators=86;, score=0.337 total
[CV 3/5; 270/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74
[CV 3/5; 269/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=6, n estimators=86;, score=0.346 total
time=
       2.0s
[CV 4/5; 270/1000] START bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=74
[CV 1/5; 270/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74;, score=0.417 total
time= 0.7s
[CV 5/5; 270/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74
[CV 5/5; 269/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=6, n estimators=86;, score=0.369 total
time=
       2.0s
[CV 1/5; 271/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160
[CV 2/5; 270/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=74;, score=0.404 total
```

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time=
        0.8s
[CV 2/5; 271/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160
[CV 5/5; 270/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=74;, score=0.394 total
time=
       0.7s
[CV 3/5; 271/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160
[CV 3/5; 270/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74;, score=0.394 total
time= 0.8s
[CV 4/5; 271/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160
[CV 4/5; 270/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=74;, score=0.403 total
time=
      0.8s
[CV 5/5; 271/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160
[CV 4/5; 268/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=2, min samples split=4, n estimators=182;, score=0.356 total
time=
      4.0s
[CV 1/5; 272/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 1/5; 268/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.380 total
time=
       5.0s
[CV 2/5; 272/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 2/5; 268/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.360 total
time=
      4.9s
[CV 3/5; 272/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 1/5; 271/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=160;, score=0.412 total
       2.1s
time=
[CV 4/5; 272/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 5/5; 268/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.351 total
time=
      4.8s
[CV 5/5; 272/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 3/5; 268/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.350 total
[CV 1/5; 273/1000] START bootstrap=True, max_depth=14, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=8

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[CV 3/5; 271/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160;, score=0.341 total
time=
      1.7s
[CV 2/5; 273/1000] START bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=4, n estimators=8
[CV 1/5; 273/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=4, n estimators=8;, score=0.382 total
time= 0.1s
[CV 3/5; 273/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8
[CV 2/5; 273/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8;, score=0.403 total
time=
      0.1s
[CV 4/5; 273/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8
[CV 3/5; 273/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8;, score=0.384 total
time= 0.1s
[CV 5/5; 273/1000] START bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=4, n estimators=8
[CV 2/5; 271/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=160;, score=0.387 total
time=
      2.0s
[CV 1/5; 274/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58
[CV 4/5; 273/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8;, score=0.376 total
time=
      0.1s
[CV 2/5; 274/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58
[CV 5/5; 273/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=8;, score=0.357 total
time=
      0.1s
[CV 3/5; 274/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=58
[CV 4/5; 271/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=160;, score=0.372 total
time=
       2.0s
[CV 4/5; 274/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58
[CV 5/5; 271/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=160;, score=0.367 total
       2.0s
[CV 5/5; 274/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58
[CV 1/5; 272/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.385 total
time=
      1.5s
```

```
[CV 1/5; 275/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144
[CV 2/5; 274/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58;, score=0.391 total
time= 0.5s
[CV 2/5; 275/1000] START bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=6, n estimators=144
[CV 1/5; 274/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=58;, score=0.396 total
time=
      0.6s
[CV 3/5; 275/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144
[CV 3/5; 274/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=58;, score=0.381 total
[CV 4/5; 275/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144
[CV 4/5; 274/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=58;, score=0.373 total
time=
      0.5s
[CV 5/5; 275/1000] START bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=6, n estimators=144
[CV 2/5; 272/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=2, min samples split=8, n estimators=64;, score=0.387 total
time= 1.5s
[CV 1/5; 276/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=50
[CV 5/5; 274/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=58;, score=0.384 total
time=
      0.6s
[CV 2/5; 276/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=50
[CV 3/5; 272/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.325 total
time=
      1.7s
[CV 3/5; 276/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=2, n estimators=50
[CV 4/5; 272/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.340 total
time=
      1.6s
[CV 4/5; 276/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=50
[CV 5/5; 272/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=8, n estimators=64;, score=0.351 total
time=
       1.6s
[CV 5/5; 276/1000] START bootstrap=True, max depth=17, max features=None,
```

[CV 1/5; 276/1000] END bootstrap=True, max depth=17, max features=None,

min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=50

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min samples leaf=2, min samples split=2, n estimators=50;, score=0.398 total
time=
      0.8s
[CV 1/5; 277/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104
[CV 2/5; 276/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=50;, score=0.404 total
time= 0.8s
[CV 2/5; 277/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=104
[CV 3/5; 276/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=2, n estimators=50;, score=0.369 total
time=
       0.8s
[CV 3/5; 277/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104
[CV 5/5; 276/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=2, n estimators=50;, score=0.387 total
time=
      0.7s
[CV 4/5; 277/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104
[CV 2/5; 275/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144;, score=0.387 total
time= 1.5s
[CV 5/5; 277/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104
[CV 4/5; 276/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=2, n estimators=50;, score=0.369 total
time=
      0.8s
[CV 1/5; 278/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36
[CV 1/5; 275/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144;, score=0.395 total
      1.8s
[CV 2/5; 278/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36
[CV 1/5; 278/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36;, score=0.409 total
time= 0.3s
[CV 3/5; 278/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36
[CV 3/5; 275/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144;, score=0.334 total
time=
      1.8s
[CV 4/5; 278/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36
[CV 4/5; 275/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144;, score=0.373 total
time=
      1.8s
[CV 5/5; 278/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
```

```
min_samples_leaf=2, min_samples_split=7, n_estimators=36
[CV 5/5; 275/1000] END bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=144;, score=0.391 total
time= 1.8s
[CV 1/5; 279/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=130
[CV 2/5; 278/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36;, score=0.376 total
time=
      0.4s
[CV 2/5; 279/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130
[CV 3/5; 278/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=36;, score=0.387 total
time=
       0.4s
[CV 3/5; 279/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130
[CV 4/5; 278/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=36;, score=0.425 total
time=
      0.3s
[CV 4/5; 279/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=130
[CV 5/5; 278/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=36;, score=0.394 total
time=
      0.3s
[CV 5/5; 279/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130
[CV 1/5; 279/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130;, score=0.417 total
[CV 1/5; 280/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152
[CV 2/5; 279/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130;, score=0.420 total
time=
      0.6s
[CV 2/5; 280/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152
[CV 3/5; 279/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130;, score=0.394 total
time= 0.6s
[CV 3/5; 280/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152
[CV 4/5; 279/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=130;, score=0.376 total
time=
      0.6s
[CV 4/5; 280/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152
[CV 2/5; 277/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104;, score=0.403 total
```

```
time=
        1.7s
[CV 5/5; 280/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152
[CV 5/5; 279/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=130;, score=0.404 total
time=
       0.6s
[CV 1/5; 281/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174
[CV 4/5; 277/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104;, score=0.373 total
time= 1.5s
[CV 2/5; 281/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174
[CV 1/5; 277/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104;, score=0.386 total
time=
      1.8s
[CV 3/5; 281/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174
[CV 5/5; 277/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=104;, score=0.384 total
time=
      1.5s
[CV 4/5; 281/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174
[CV 3/5; 277/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=104;, score=0.387 total
time=
       1.7s
[CV 5/5; 281/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174
[CV 4/5; 281/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174;, score=0.370 total
time=
      1.0s
[CV 1/5; 282/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 2/5; 281/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=174;, score=0.398 total
time= 1.1s
[CV 2/5; 282/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 3/5; 281/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174;, score=0.357 total
time=
      1.2s
[CV 3/5; 282/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 1/5; 281/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174;, score=0.406 total
[CV 4/5; 282/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
```

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[CV 5/5; 281/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=174;, score=0.411 total
time=
      1.2s
[CV 5/5; 282/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=7, n estimators=102
[CV 4/5; 280/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=152;, score=0.373 total
time= 1.9s
[CV 1/5; 283/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138
[CV 1/5; 280/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152;, score=0.409 total
time=
       2.2s
[CV 2/5; 283/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138
[CV 2/5; 280/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152;, score=0.381 total
       2.1s
[CV 3/5; 283/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=138
[CV 3/5; 280/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=152;, score=0.344 total
time=
      2.2s
[CV 4/5; 283/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138
[CV 5/5; 280/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=152;, score=0.373 total
time=
       2.1s
[CV 5/5; 283/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138
[CV 1/5; 282/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.409 total
time= 1.1s
[CV 1/5; 284/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74
[CV 2/5; 282/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=102;, score=0.404 total
time=
      1.1s
[CV 2/5; 284/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 4/5; 282/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.410 total
[CV 3/5; 284/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 3/5; 282/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.384 total
time=
      1.3s
```

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[CV 4/5; 284/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 1/5; 284/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74;, score=0.414 total
time= 0.5s
[CV 5/5; 284/1000] START bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74
[CV 5/5; 282/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=7, n estimators=102;, score=0.385 total
time=
      1.3s
[CV 1/5; 285/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 1/5; 285/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.408 total
[CV 2/5; 285/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 2/5; 284/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74;, score=0.414 total
time=
      0.6s
[CV 3/5; 285/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32
[CV 1/5; 283/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138;, score=0.390 total
time= 1.2s
[CV 4/5; 285/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 2/5; 285/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.400 total
time=
      0.2s
[CV 5/5; 285/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 2/5; 283/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138;, score=0.417 total
time=
      1.2s
[CV 1/5; 286/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56
[CV 3/5; 283/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138;, score=0.373 total
time=
      1.2s
[CV 2/5; 286/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 3/5; 285/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.359 total
time=
       0.2s
[CV 3/5; 286/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 3/5; 284/1000] END bootstrap=True, max depth=14, max features=sqrt,
```

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min samples leaf=2, min samples split=2, n estimators=74;, score=0.375 total
time=
      0.7s
[CV 4/5; 286/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 4/5; 283/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138;, score=0.391 total
time= 1.2s
[CV 5/5; 286/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56
[CV 5/5; 284/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74;, score=0.400 total
time=
       0.6s
[CV 1/5; 287/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86
[CV 4/5; 285/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.372 total
time=
      0.2s
[CV 2/5; 287/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86
[CV 5/5; 285/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.395 total
time= 0.2s
[CV 3/5; 287/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86
[CV 4/5; 284/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74;, score=0.400 total
time= 0.7s
[CV 4/5; 287/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86
[CV 5/5; 283/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=138;, score=0.381 total
      1.2s
[CV 5/5; 287/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86
[CV 2/5; 286/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56;, score=0.395 total
time= 0.5s
[CV 1/5; 288/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=88
[CV 1/5; 286/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56;, score=0.420 total
      0.6s
time=
[CV 2/5; 288/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=88
[CV 3/5; 286/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=56;, score=0.410 total
time=
       0.6s
```

[CV 3/5; 288/1000] START bootstrap=True, max\_depth=13, max\_features=sqrt,

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min_samples_leaf=1, min_samples_split=4, n_estimators=88
[CV 4/5; 286/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=56;, score=0.385 total
time= 0.6s
[CV 4/5; 288/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=88
[CV 5/5; 286/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56;, score=0.382 total
time=
      0.6s
[CV 5/5; 288/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=88
[CV 1/5; 288/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=88;, score=0.389 total
time=
       0.6s
[CV 1/5; 289/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184
[CV 2/5; 288/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=88;, score=0.408 total
time=
      0.7s
[CV 2/5; 289/1000] START bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=184
[CV 4/5; 287/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86;, score=0.381 total
time=
      1.2s
[CV 3/5; 289/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184
[CV 3/5; 288/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=88;, score=0.381 total
[CV 4/5; 288/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=88;, score=0.378 total
time= 0.7s
[CV 4/5; 289/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184
[CV 5/5; 289/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184
[CV 5/5; 288/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=88;, score=0.388 total
time= 0.7s
[CV 1/5; 290/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16
[CV 1/5; 290/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=16;, score=0.409 total
time=
      0.1s
[CV 2/5; 290/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16
[CV 2/5; 287/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=1, min samples split=7, n estimators=86;, score=0.410 total
```

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time=
        1.4s
[CV 3/5; 290/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16
[CV 3/5; 287/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=1, min samples split=7, n estimators=86;, score=0.373 total
       1.5s
time=
[CV 4/5; 290/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16
[CV 2/5; 290/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16;, score=0.375 total
time= 0.1s
[CV 5/5; 290/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=16
[CV 5/5; 287/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86;, score=0.384 total
time=
      1.4s
[CV 1/5; 291/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4
[CV 3/5; 290/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=16;, score=0.366 total
time=
      0.1s
[CV 2/5; 291/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4
[CV 1/5; 291/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4;, score=0.412 total
time=
      0.0s
[CV 3/5; 291/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4
[CV 2/5; 291/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4;, score=0.394 total
time=
      0.0s
[CV 4/5; 291/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4
[CV 3/5; 291/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=4;, score=0.398 total
time= 0.0s
[CV 5/5; 291/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4
[CV 4/5; 291/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=4;, score=0.397 total
time= 0.0s
[CV 1/5; 292/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168
[CV 1/5; 287/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=86;, score=0.406 total
[CV 4/5; 290/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=16;, score=0.376 total
```

```
time=
        0.2s
[CV 3/5; 292/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168
[CV 2/5; 292/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=168
[CV 5/5; 291/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=4;, score=0.370 total
time= 0.0s
[CV 4/5; 292/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168
[CV 5/5; 290/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=16;, score=0.392 total
time=
      0.1s
[CV 5/5; 292/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168
[CV 2/5; 292/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168;, score=0.381 total
time= 1.4s
[CV 1/5; 293/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=44
[CV 1/5; 292/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=168;, score=0.417 total
time=
      1.7s
[CV 2/5; 293/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44
[CV 4/5; 292/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168;, score=0.376 total
time=
      1.7s
[CV 3/5; 292/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=168;, score=0.370 total
time=
      1.7s
[CV 3/5; 293/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44
[CV 4/5; 293/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=44
[CV 5/5; 292/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=168;, score=0.372 total
time=
      1.7s
[CV 5/5; 293/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44
[CV 1/5; 293/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=44;, score=0.402 total
      0.5s
[CV 1/5; 294/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=76
[CV 3/5; 289/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184;, score=0.360 total
time=
       2.5s
```

```
[CV 2/5; 294/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=76
[CV 3/5; 293/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44;, score=0.353 total
time= 0.5s
[CV 3/5; 294/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=7, n estimators=76
[CV 2/5; 293/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=44;, score=0.385 total
time=
      0.5s
[CV 4/5; 294/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=76
[CV 1/5; 289/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184;, score=0.377 total
[CV 5/5; 294/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=76
[CV 5/5; 293/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44;, score=0.385 total
time=
      0.5s
[CV 1/5; 295/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=1, min samples split=4, n estimators=128
[CV 4/5; 293/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=44;, score=0.379 total
time= 0.6s
[CV 2/5; 295/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 2/5; 289/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184;, score=0.369 total
time=
       2.8s
[CV 3/5; 295/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 4/5; 289/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=184;, score=0.359 total
time= 3.0s
[CV 5/5; 289/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=184;, score=0.366 total
time=
       3.0s
[CV 4/5; 295/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 5/5; 295/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 1/5; 294/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=7, n estimators=76;, score=0.387 total
time=
       1.7s
[CV 1/5; 296/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134
[CV 5/5; 294/1000] END bootstrap=False, max_depth=13, max_features=None,
```

```
min samples leaf=3, min samples split=7, n estimators=76;, score=0.375 total
time=
      1.4s
[CV 2/5; 296/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134
[CV 3/5; 294/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=76;, score=0.350 total
time= 1.5s
[CV 3/5; 296/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=134
[CV 2/5; 294/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=7, n estimators=76;, score=0.360 total
       1.7s
time=
[CV 4/5; 296/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134
[CV 4/5; 294/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=7, n estimators=76;, score=0.372 total
time=
      1.6s
[CV 5/5; 296/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134
[CV 2/5; 295/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.411 total
time=
       2.2s
[CV 1/5; 297/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=110
[CV 1/5; 295/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.374 total
time=
      2.3s
[CV 2/5; 297/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110
[CV 3/5; 295/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.372 total
       2.3s
[CV 3/5; 297/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110
[CV 4/5; 295/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.365 total
time= 2.2s
[CV 4/5; 297/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110
[CV 5/5; 295/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.376 total
       2.4s
time=
[CV 5/5; 297/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110
[CV 3/5; 296/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134;, score=0.341 total
time=
      1.6s
[CV 2/5; 296/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=2, n_estimators=134;, score=0.408 total
time=
      1.6s
[CV 1/5; 298/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=46
[CV 2/5; 298/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=46
[CV 1/5; 298/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=46;, score=0.405 total
time=
      0.2s
[CV 3/5; 298/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=46
[CV 2/5; 298/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=46;, score=0.416 total
time=
       0.2s
[CV 4/5; 298/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=46
[CV 3/5; 298/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=46;, score=0.394 total
time=
      0.2s
[CV 1/5; 296/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134;, score=0.406 total
time=
       2.0s
[CV 5/5; 298/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=46
[CV 1/5; 299/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50
[CV 4/5; 298/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=46;, score=0.398 total
[CV 2/5; 299/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50
[CV 5/5; 296/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134;, score=0.375 total
time=
      1.9s
[CV 3/5; 299/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50
[CV 4/5; 296/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=134;, score=0.372 total
time= 1.9s
[CV 4/5; 299/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50
[CV 5/5; 298/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=46;, score=0.372 total
time=
      0.2s
[CV 5/5; 299/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50
[CV 1/5; 297/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110;, score=0.392 total
```

```
time=
        1.8s
[CV 1/5; 300/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162
[CV 2/5; 299/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=2, min samples split=7, n estimators=50;, score=0.382 total
time=
       0.8s
[CV 2/5; 300/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162
[CV 2/5; 297/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110;, score=0.410 total
time= 1.9s
[CV 3/5; 300/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162
[CV 1/5; 299/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50;, score=0.383 total
time=
      0.9s
[CV 4/5; 300/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162
[CV 3/5; 297/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=110;, score=0.376 total
time=
       2.0s
[CV 5/5; 300/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162
[CV 4/5; 297/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110;, score=0.378 total
       1.9s
[CV 4/5; 299/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50;, score=0.365 total
[CV 1/5; 301/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82
[CV 2/5; 301/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82
[CV 3/5; 299/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=2, min samples split=7, n estimators=50;, score=0.370 total
time= 1.0s
[CV 3/5; 301/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82
[CV 5/5; 299/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=50;, score=0.367 total
time=
      0.9s
[CV 4/5; 301/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82
[CV 5/5; 297/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=110;, score=0.376 total
```

[CV 5/5; 301/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt,

min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=82

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[CV 3/5; 301/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82;, score=0.375 total
time=
      1.2s
[CV 1/5; 302/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=188
[CV 2/5; 301/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=82;, score=0.395 total
time=
      1.3s
[CV 2/5; 302/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188
[CV 4/5; 301/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=82;, score=0.357 total
time=
      1.3s
[CV 3/5; 302/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188
[CV 1/5; 301/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=82;, score=0.370 total
time= 1.5s
[CV 4/5; 302/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=188
[CV 5/5; 301/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=82;, score=0.373 total
      1.4s
[CV 5/5; 302/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188
[CV 1/5; 300/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162;, score=0.371 total
time=
       2.1s
[CV 1/5; 303/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86
[CV 2/5; 300/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162;, score=0.373 total
time=
      2.6s
[CV 2/5; 303/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=6, n estimators=86
[CV 3/5; 300/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=7, n estimators=162;, score=0.351 total
time=
       2.5s
[CV 3/5; 303/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86
[CV 4/5; 300/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162;, score=0.356 total
[CV 4/5; 303/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86
[CV 5/5; 300/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=162;, score=0.367 total
time=
       2.5s
```

```
[CV 5/5; 303/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86
[CV 1/5; 303/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86;, score=0.371 total
time= 1.1s
[CV 1/5; 304/1000] START bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=172
[CV 2/5; 303/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=6, n estimators=86;, score=0.370 total
time=
      1.4s
[CV 2/5; 304/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172
[CV 4/5; 303/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=6, n estimators=86;, score=0.356 total
[CV 3/5; 303/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86;, score=0.351 total
time= 1.3s
[CV 3/5; 304/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=172
[CV 4/5; 304/1000] START bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=172
[CV 5/5; 303/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=86;, score=0.369 total
time= 1.3s
[CV 5/5; 304/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172
[CV 2/5; 302/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.407 total
time=
      3.1s
[CV 1/5; 305/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140
[CV 5/5; 302/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.376 total
time=
      2.8s
[CV 2/5; 305/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=5, n estimators=140
[CV 4/5; 302/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.366 total
      3.1s
[CV 3/5; 302/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.363 total
[CV 3/5; 305/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140
[CV 4/5; 305/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140
[CV 1/5; 302/1000] END bootstrap=True, max depth=20, max features=None,
```

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min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.395 total
time=
      3.5s
[CV 5/5; 305/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140
[CV 1/5; 304/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172;, score=0.389 total
time= 2.6s
[CV 1/5; 306/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=4, n estimators=148
[CV 2/5; 305/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140;, score=0.367 total
time=
       1.8s
[CV 2/5; 306/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 2/5; 304/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172;, score=0.385 total
time=
       2.6s
[CV 3/5; 306/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 4/5; 304/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172;, score=0.372 total
time=
       2.6s
[CV 4/5; 306/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 4/5; 305/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140;, score=0.357 total
time=
      1.7s
[CV 5/5; 306/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148
[CV 3/5; 304/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172;, score=0.357 total
[CV 1/5; 307/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=82
[CV 5/5; 304/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=172;, score=0.373 total
time=
       2.6s
[CV 2/5; 307/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=82
[CV 1/5; 305/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140;, score=0.376 total
       2.2s
time=
[CV 3/5; 307/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=82
[CV 3/5; 305/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140;, score=0.353 total
time=
       2.2s
```

[CV 4/5; 307/1000] START bootstrap=False, max depth=5, max features=None,

```
min_samples_leaf=1, min_samples_split=6, n_estimators=82
[CV 5/5; 305/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=140;, score=0.370 total
       2.4s
[CV 5/5; 307/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=6, n estimators=82
[CV 2/5; 307/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=82;, score=0.387 total
time=
      0.8s
[CV 1/5; 308/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 1/5; 307/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=6, n estimators=82;, score=0.405 total
time=
       0.9s
[CV 2/5; 308/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 3/5; 307/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=6, n estimators=82;, score=0.397 total
time=
      0.9s
[CV 3/5; 308/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=5, n estimators=198
[CV 4/5; 307/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=82;, score=0.367 total
time=
      0.9s
[CV 4/5; 308/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 5/5; 307/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=6, n estimators=82;, score=0.394 total
[CV 5/5; 308/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198
[CV 1/5; 306/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=148;, score=0.386 total
time=
       2.7s
[CV 1/5; 309/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2
[CV 1/5; 309/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2;, score=0.380 total
time= 0.0s
[CV 2/5; 309/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2
[CV 2/5; 309/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2;, score=0.354 total
time=
       0.0s
[CV 3/5; 309/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2
[CV 3/5; 309/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=2;, score=0.340 total
```

time= 0.0s [CV 4/5; 309/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=2 [CV 4/5; 309/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min samples leaf=1, min samples split=3, n estimators=2;, score=0.359 total time= 0.0s [CV 5/5; 309/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=2 [CV 5/5; 309/1000] END bootstrap=False, max depth=19, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=2;, score=0.362 total time= 0.0s [CV 1/5; 310/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=66 [CV 2/5; 306/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=148;, score=0.401 total time= 2.5s[CV 2/5; 310/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=66 [CV 5/5; 306/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=4, n estimators=148;, score=0.366 total time= 2.4s[CV 3/5; 310/1000] START bootstrap=False, max depth=15, max features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=66 [CV 4/5; 306/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=148;, score=0.356 total time= 2.5s[CV 4/5; 310/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=66 [CV 3/5; 306/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=148;, score=0.388 total time= 2.7s [CV 5/5; 310/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=66 [CV 1/5; 308/1000] END bootstrap=True, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=5, n estimators=198;, score=0.401 total 2.1s time= [CV 1/5; 311/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=56 [CV 2/5; 308/1000] END bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=198;, score=0.416 total time= 2.1s [CV 2/5; 311/1000] START bootstrap=True, max depth=17, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=56 [CV 3/5; 308/1000] END bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=198;, score=0.395 total [CV 3/5; 311/1000] START bootstrap=True, max\_depth=17, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=56

```
[CV 4/5; 308/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.398 total
time=
      1.8s
[CV 4/5; 311/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=1, min samples split=4, n estimators=56
[CV 1/5; 310/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=1, min samples split=5, n estimators=66;, score=0.396 total
time=
      1.7s
[CV 5/5; 311/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=56
[CV 5/5; 308/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=198;, score=0.391 total
time=
       2.1s
[CV 1/5; 312/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=96
[CV 3/5; 310/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=66;, score=0.335 total
time= 1.4s
[CV 2/5; 312/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=4, n estimators=96
[CV 1/5; 311/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=4, n estimators=56;, score=0.385 total
time= 0.9s
[CV 3/5; 312/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=96
[CV 4/5; 311/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=1, min samples split=4, n estimators=56;, score=0.381 total
time=
      0.8s
[CV 4/5; 312/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=96
[CV 2/5; 311/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=56;, score=0.404 total
time=
      0.9s
[CV 5/5; 312/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=4, n estimators=96
[CV 2/5; 310/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=1, min samples split=5, n estimators=66;, score=0.359 total
time=
      1.7s
[CV 1/5; 313/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86
[CV 3/5; 311/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=1, min samples split=4, n estimators=56;, score=0.375 total
[CV 2/5; 313/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86
[CV 4/5; 310/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=66;, score=0.338 total
time=
       1.6s
```

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[CV 3/5; 313/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86
[CV 5/5; 310/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=66;, score=0.379 total
time= 1.7s
[CV 4/5; 313/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=86
[CV 5/5; 311/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=1, min samples split=4, n estimators=56;, score=0.387 total
time=
      0.9s
[CV 5/5; 313/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86
[CV 1/5; 313/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=86;, score=0.430 total
[CV 2/5; 313/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86;, score=0.417 total
time= 0.6s
[CV 1/5; 314/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=7, n estimators=40
[CV 2/5; 314/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=7, n estimators=40
[CV 3/5; 313/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86;, score=0.397 total
time= 0.6s
[CV 3/5; 314/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=40
[CV 4/5; 313/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=86;, score=0.420 total
time=
      0.6s
[CV 4/5; 314/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=40
[CV 2/5; 312/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=96;, score=0.411 total
time=
      1.4s
[CV 5/5; 314/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=7, n estimators=40
[CV 5/5; 313/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=86;, score=0.370 total
time=
      0.6s
[CV 1/5; 315/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28
[CV 3/5; 314/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=7, n estimators=40;, score=0.376 total
time=
       0.6s
[CV 2/5; 315/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28
[CV 2/5; 314/1000] END bootstrap=True, max depth=18, max features=None,
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min samples leaf=2, min samples split=7, n estimators=40;, score=0.400 total
time=
      0.7s
[CV 3/5; 315/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28
[CV 1/5; 314/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=40;, score=0.395 total
time= 0.7s
[CV 4/5; 315/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=28
[CV 4/5; 312/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=4, n estimators=96;, score=0.369 total
       1.4s
time=
[CV 5/5; 315/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28
[CV 1/5; 312/1000] END bootstrap=True, max depth=19, max features=None,
min samples leaf=1, min samples split=4, n estimators=96;, score=0.371 total
time=
      1.7s
[CV 1/5; 316/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=84
[CV 1/5; 315/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28;, score=0.386 total
time= 0.3s
[CV 2/5; 316/1000] START bootstrap=True, max_depth=17, max_features=None,
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- [CV 2/5; 316/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=84
  [CV 5/5; 312/1000] END bootstrap=True, max\_depth=19, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=96;, score=0.389 total time= 1.7s
  [CV 3/5; 316/1000] START bootstrap=True, max\_depth=17, max\_features=None,
- min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=84 [CV 4/5; 314/1000] END bootstrap=True, max\_depth=18, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=40;, score=0.384 total time= 0.7s
- [CV 4/5; 316/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=84
- [CV 2/5; 315/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=28;, score=0.389 total time= 0.3s
- [CV 3/5; 312/1000] END bootstrap=True, max\_depth=19, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=96;, score=0.373 total time= 1.8s
- [CV 5/5; 316/1000] START bootstrap=True, max\_depth=17, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=84
- [CV 1/5; 317/1000] START bootstrap=True, max\_depth=18, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=160
- [CV 4/5; 315/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=28;, score=0.376 total time= 0.3s
- [CV 2/5; 317/1000] START bootstrap=True, max\_depth=18, max\_features=sqrt,

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min_samples_leaf=2, min_samples_split=8, n_estimators=160
[CV 3/5; 315/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=28;, score=0.391 total
time= 0.4s
[CV 3/5; 317/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=160
[CV 5/5; 315/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=28;, score=0.395 total
time=
      0.4s
[CV 4/5; 317/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160
[CV 5/5; 314/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=7, n estimators=40;, score=0.372 total
time=
       0.6s
[CV 5/5; 317/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160
[CV 4/5; 316/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=8, n estimators=84;, score=0.381 total
time=
      1.1s
[CV 1/5; 318/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=58
[CV 1/5; 316/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=84;, score=0.402 total
time=
      1.4s
[CV 2/5; 318/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 2/5; 316/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=8, n estimators=84;, score=0.392 total
[CV 3/5; 318/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 1/5; 318/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=58;, score=0.409 total
time=
      0.3s
[CV 4/5; 318/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=58
[CV 5/5; 317/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160;, score=0.397 total
time= 1.2s
[CV 5/5; 318/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 5/5; 316/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=8, n estimators=84;, score=0.372 total
time=
      1.3s
[CV 1/5; 319/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 3/5; 316/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=8, n estimators=84;, score=0.378 total
```

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time=
        1.4s
[CV 2/5; 319/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 2/5; 318/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=58;, score=0.407 total
time=
       0.3s
[CV 3/5; 319/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 3/5; 318/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=58;, score=0.384 total
time= 0.3s
[CV 1/5; 317/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160;, score=0.406 total
time=
      1.5s
[CV 4/5; 319/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64
[CV 2/5; 317/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160;, score=0.389 total
time=
      1.5s
[CV 5/5; 319/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=64
[CV 1/5; 320/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148
[CV 4/5; 318/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=58;, score=0.385 total
time=
      0.3s
[CV 4/5; 317/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160;, score=0.398 total
[CV 2/5; 320/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148
[CV 3/5; 320/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148
[CV 5/5; 318/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=58;, score=0.407 total
time= 0.3s
[CV 4/5; 320/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148
[CV 3/5; 317/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=160;, score=0.365 total
time=
      1.6s
[CV 5/5; 320/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148
[CV 1/5; 319/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.390 total
[CV 1/5; 321/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118
```

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[CV 2/5; 319/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.362 total
time=
      1.5s
[CV 2/5; 321/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=118
[CV 4/5; 319/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=64;, score=0.372 total
time= 1.4s
[CV 3/5; 321/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118
[CV 3/5; 319/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=2, min samples split=8, n estimators=64;, score=0.348 total
time=
      1.5s
[CV 4/5; 321/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118
[CV 5/5; 319/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=64;, score=0.365 total
time= 1.5s
[CV 5/5; 321/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=118
[CV 2/5; 320/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=148;, score=0.387 total
time= 1.9s
[CV 1/5; 322/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8
[CV 5/5; 320/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148;, score=0.387 total
time=
      1.8s
[CV 2/5; 322/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8
[CV 1/5; 322/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8;, score=0.395 total
time=
      0.1s
[CV 3/5; 322/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=8
[CV 2/5; 322/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=8;, score=0.360 total
time=
      0.1s
[CV 4/5; 322/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8
[CV 1/5; 320/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148;, score=0.399 total
       2.2s
[CV 5/5; 322/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8
[CV 4/5; 322/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8;, score=0.369 total
time=
       0.1s
```

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[CV 1/5; 323/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160
[CV 3/5; 322/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=8;, score=0.369 total
time= 0.1s
[CV 2/5; 323/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=7, n estimators=160
[CV 5/5; 322/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=8;, score=0.381 total
time=
      0.2s
[CV 3/5; 323/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160
[CV 1/5; 321/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118;, score=0.408 total
[CV 4/5; 323/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160
[CV 2/5; 321/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118;, score=0.414 total
time=
      1.0s
[CV 5/5; 323/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=7, n estimators=160
[CV 3/5; 320/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148;, score=0.360 total
time=
       2.3s
[CV 1/5; 324/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 3/5; 321/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118;, score=0.382 total
time=
      1.0s
[CV 2/5; 324/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 4/5; 321/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118;, score=0.410 total
time=
      1.0s
[CV 3/5; 324/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=1, min samples split=6, n estimators=90
[CV 4/5; 320/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=148;, score=0.363 total
time=
       2.4s
[CV 4/5; 324/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 5/5; 321/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=118;, score=0.389 total
time=
       1.0s
[CV 5/5; 324/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
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[CV 2/5; 323/1000] END bootstrap=True, max depth=19, max features=None,

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min_samples_leaf=3, min_samples_split=7, n_estimators=160;, score=0.394 total
time=
       2.6s
[CV 1/5; 325/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 1/5; 323/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160;, score=0.390 total
time= 2.7s
[CV 2/5; 325/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24
[CV 4/5; 323/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160;, score=0.365 total
time=
       2.6s
[CV 3/5; 325/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 5/5; 323/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160;, score=0.382 total
time=
       2.6s
[CV 4/5; 325/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 1/5; 325/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24;, score=0.390 total
time= 0.2s
[CV 5/5; 325/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 3/5; 323/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=160;, score=0.375 total
time=
      2.7s
[CV 1/5; 326/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178
[CV 2/5; 325/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24;, score=0.398 total
time= 0.2s
[CV 2/5; 326/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178
[CV 3/5; 325/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24;, score=0.382 total
time= 0.2s
[CV 3/5; 326/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178
[CV 4/5; 325/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24;, score=0.395 total
      0.2s
time=
[CV 4/5; 326/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178
[CV 4/5; 324/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=6, n estimators=90;, score=0.348 total
time=
       2.7s
```

[CV 5/5; 326/1000] START bootstrap=True, max depth=14, max features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=178 [CV 5/5; 324/1000] END bootstrap=False, max\_depth=None, max\_features=None, min samples leaf=1, min samples split=6, n estimators=90;, score=0.346 total time= 2.7s [CV 1/5; 327/1000] START bootstrap=True, max depth=20, max features=sqrt, min samples leaf=1, min samples split=6, n estimators=70 [CV 5/5; 325/1000] END bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=24;, score=0.379 total time= 0.3s [CV 2/5; 327/1000] START bootstrap=True, max\_depth=20, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=70 [CV 2/5; 324/1000] END bootstrap=False, max\_depth=None, max\_features=None, min samples leaf=1, min samples split=6, n estimators=90;, score=0.335 total time= 2.9s [CV 3/5; 327/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=70 [CV 3/5; 324/1000] END bootstrap=False, max\_depth=None, max\_features=None, min samples leaf=1, min samples split=6, n estimators=90;, score=0.357 total time= 2.9s [CV 4/5; 327/1000] START bootstrap=True, max depth=20, max features=sqrt, min samples leaf=1, min samples split=6, n estimators=70 [CV 1/5; 324/1000] END bootstrap=False, max depth=None, max features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=90;, score=0.339 total time= 3.0s [CV 5/5; 327/1000] START bootstrap=True, max\_depth=20, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=70 [CV 1/5; 327/1000] END bootstrap=True, max depth=20, max features=sqrt, min samples leaf=1, min samples split=6, n estimators=70;, score=0.401 total [CV 1/5; 328/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=156 [CV 5/5; 327/1000] END bootstrap=True, max\_depth=20, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=70;, score=0.395 total time= 0.6s [CV 2/5; 328/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=156 [CV 3/5; 327/1000] END bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=70;, score=0.382 total time= 0.7s[CV 3/5; 328/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=156 [CV 4/5; 327/1000] END bootstrap=True, max depth=20, max features=sqrt, min samples leaf=1, min samples split=6, n estimators=70;, score=0.385 total time= 0.7s [CV 4/5; 328/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=156 [CV 2/5; 327/1000] END bootstrap=True, max\_depth=20, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=70;, score=0.397 total

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time=
        0.7s
[CV 5/5; 328/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=156
[CV 4/5; 326/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=178;, score=0.391 total
time=
       1.3s
[CV 1/5; 329/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 1/5; 326/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178;, score=0.398 total
time=
      1.5s
[CV 2/5; 329/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 3/5; 326/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178;, score=0.376 total
time=
      1.5s
[CV 3/5; 329/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 2/5; 326/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=178;, score=0.407 total
time=
      1.6s
[CV 4/5; 329/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 5/5; 326/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=178;, score=0.370 total
time=
       1.5s
[CV 5/5; 329/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 1/5; 329/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78;, score=0.405 total
time=
      0.6s
[CV 1/5; 330/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12
[CV 1/5; 330/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=4, n estimators=12;, score=0.402 total
time= 0.1s
[CV 2/5; 330/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12
[CV 2/5; 330/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12;, score=0.388 total
time=
      0.1s
[CV 3/5; 330/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12
[CV 2/5; 329/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78;, score=0.411 total
[CV 4/5; 330/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12
```

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[CV 3/5; 329/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=78;, score=0.372 total
time=
      0.7s
[CV 5/5; 330/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=4, n estimators=12
[CV 4/5; 329/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=78;, score=0.372 total
time= 0.7s
[CV 1/5; 331/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 3/5; 330/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=4, n estimators=12;, score=0.406 total
time=
      0.1s
[CV 2/5; 331/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 4/5; 330/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12;, score=0.391 total
time= 0.2s
[CV 3/5; 331/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=138
[CV 5/5; 329/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=78;, score=0.379 total
time= 0.7s
[CV 4/5; 331/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 2/5; 328/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.381 total
time=
      1.5s
[CV 5/5; 331/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 5/5; 330/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=12;, score=0.398 total
time=
      0.2s
[CV 1/5; 332/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=90
[CV 1/5; 328/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=156;, score=0.408 total
time=
      1.6s
[CV 2/5; 332/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 4/5; 328/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.388 total
[CV 3/5; 332/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 3/5; 328/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.372 total
time=
       1.7s
```

```
[CV 4/5; 332/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90
[CV 5/5; 328/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=156;, score=0.375 total
time= 1.8s
[CV 5/5; 332/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=90
[CV 2/5; 331/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=138;, score=0.422 total
time=
      0.7s
[CV 1/5; 333/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=66
[CV 1/5; 331/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.406 total
       0.8s
[CV 2/5; 333/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=66
[CV 3/5; 331/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.404 total
time=
      0.8s
[CV 3/5; 333/1000] START bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=2, n estimators=66
[CV 4/5; 331/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.410 total
time= 0.8s
[CV 4/5; 333/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=66
[CV 5/5; 331/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.385 total
time=
      0.8s
[CV 5/5; 333/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=66
[CV 2/5; 332/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90;, score=0.362 total
time=
      1.1s
[CV 1/5; 334/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=36
[CV 1/5; 332/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90;, score=0.406 total
time=
      1.4s
[CV 2/5; 334/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36
[CV 4/5; 332/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=90;, score=0.363 total
time=
       1.3s
[CV 3/5; 334/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36
[CV 1/5; 334/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
```

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min samples leaf=3, min samples split=6, n estimators=36;, score=0.415 total
time=
      0.4s
[CV 4/5; 334/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36
[CV 3/5; 332/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=90;, score=0.346 total
time= 1.3s
[CV 5/5; 334/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=36
[CV 5/5; 332/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=90;, score=0.357 total
time=
       1.3s
[CV 1/5; 335/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166
[CV 1/5; 333/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=1, min samples split=2, n estimators=66;, score=0.395 total
time=
      1.1s
[CV 2/5; 335/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166
[CV 2/5; 334/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36;, score=0.381 total
time= 0.5s
[CV 3/5; 335/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=166
[CV 4/5; 334/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=36;, score=0.369 total
time=
      0.4s
[CV 4/5; 335/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166
[CV 2/5; 333/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=66;, score=0.365 total
      1.3s
[CV 5/5; 335/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166
[CV 3/5; 334/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36;, score=0.363 total
time= 0.5s
[CV 1/5; 336/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=28
[CV 5/5; 334/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=36;, score=0.392 total
      0.5s
time=
[CV 2/5; 336/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=28
[CV 3/5; 333/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=1, min samples split=2, n estimators=66;, score=0.354 total
time=
      1.3s
```

[CV 3/5; 336/1000] START bootstrap=False, max\_depth=10, max\_features=sqrt,

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min_samples_leaf=1, min_samples_split=4, n_estimators=28
[CV 4/5; 333/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=1, min samples split=2, n estimators=66;, score=0.365 total
time= 1.3s
[CV 4/5; 336/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=28
[CV 5/5; 333/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=2, n estimators=66;, score=0.382 total
time=
      1.3s
[CV 5/5; 336/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=28
[CV 1/5; 336/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=28;, score=0.409 total
time=
       0.3s
[CV 1/5; 337/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=48
[CV 2/5; 336/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=28;, score=0.369 total
time=
      0.3s
[CV 2/5; 337/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=1, min samples split=5, n estimators=48
[CV 3/5; 336/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=28;, score=0.376 total
time=
      0.3s
[CV 3/5; 337/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=48
[CV 4/5; 336/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=28;, score=0.375 total
[CV 4/5; 337/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=48
[CV 5/5; 336/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=28;, score=0.376 total
time=
      0.3s
[CV 5/5; 337/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=1, min samples split=5, n estimators=48
[CV 1/5; 335/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166;, score=0.398 total
time= 1.3s
[CV 1/5; 338/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=22
[CV 2/5; 335/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166;, score=0.404 total
time=
      1.4s
[CV 2/5; 338/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=22
[CV 1/5; 337/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=1, min samples split=5, n estimators=48;, score=0.383 total
```

time= 0.8s [CV 3/5; 338/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=22 [CV 2/5; 337/1000] END bootstrap=False, max\_depth=10, max\_features=None, min samples leaf=1, min samples split=5, n estimators=48;, score=0.360 total time= 0.9s [CV 4/5; 338/1000] START bootstrap=False, max depth=19, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=22 [CV 3/5; 335/1000] END bootstrap=True, max depth=15, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=166;, score=0.394 total time= 1.4s[CV 5/5; 338/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=22 [CV 4/5; 337/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=48;, score=0.350 total time= 0.9s [CV 1/5; 339/1000] START bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 1/5; 338/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min samples leaf=2, min samples split=9, n estimators=22;, score=0.389 total time= 0.3s [CV 2/5; 339/1000] START bootstrap=False, max depth=13, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 3/5; 337/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=48;, score=0.334 total time= 0.9s [CV 3/5; 339/1000] START bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 5/5; 337/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=48;, score=0.365 total time= 0.9s [CV 4/5; 339/1000] START bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 2/5; 338/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min samples leaf=2, min samples split=9, n estimators=22;, score=0.391 total time= 0.3s[CV 5/5; 339/1000] START bootstrap=False, max depth=13, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 3/5; 338/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=22;, score=0.354 total time= 0.3s [CV 1/5; 340/1000] START bootstrap=True, max depth=12, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=130 [CV 4/5; 335/1000] END bootstrap=True, max depth=15, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=166;, score=0.398 total [CV 2/5; 340/1000] START bootstrap=True, max\_depth=12, max\_features=None,

min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=130

```
[CV 5/5; 335/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=166;, score=0.394 total
time=
      1.4s
[CV 3/5; 340/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=9, n estimators=130
[CV 5/5; 338/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=22;, score=0.365 total
time=
      0.3s
[CV 4/5; 340/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 4/5; 338/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=22;, score=0.370 total
time=
      0.3s
[CV 5/5; 340/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 2/5; 340/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.407 total
time= 1.4s
[CV 1/5; 341/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=3, n estimators=160
[CV 4/5; 340/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=9, n estimators=130;, score=0.407 total
time= 1.4s
[CV 2/5; 341/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160
[CV 1/5; 340/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.405 total
time=
      1.7s
[CV 3/5; 341/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160
[CV 3/5; 340/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.387 total
time=
      1.7s
[CV 4/5; 341/1000] START bootstrap=True, max depth=None, max features=None,
min samples leaf=1, min samples split=3, n estimators=160
[CV 2/5; 339/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=9, n estimators=86;, score=0.365 total
time=
      1.9s
[CV 5/5; 341/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160
[CV 1/5; 339/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=9, n estimators=86;, score=0.395 total
      1.9s
[CV 1/5; 342/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36
[CV 3/5; 339/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=86;, score=0.344 total
```

1.9s

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[CV 2/5; 342/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36
[CV 4/5; 339/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=86;, score=0.370 total
time= 1.9s
[CV 3/5; 342/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=36
[CV 5/5; 339/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=9, n estimators=86;, score=0.378 total
time=
      1.9s
[CV 4/5; 342/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36
[CV 5/5; 340/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.387 total
[CV 5/5; 342/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36
[CV 1/5; 342/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36;, score=0.409 total
time=
      0.3s
[CV 2/5; 342/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=36;, score=0.395 total
time= 0.3s
[CV 1/5; 343/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184
[CV 2/5; 343/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184
[CV 3/5; 342/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=36;, score=0.366 total
time=
      0.3s
[CV 3/5; 343/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184
[CV 4/5; 342/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36;, score=0.387 total
time= 0.3s
[CV 4/5; 343/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=9, n estimators=184
[CV 5/5; 342/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=36;, score=0.382 total
time=
      0.3s
[CV 5/5; 343/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184
[CV 5/5; 343/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184;, score=0.395 total
time=
       1.8s
[CV 1/5; 344/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196
[CV 2/5; 341/1000] END bootstrap=True, max_depth=None, max_features=None,
```

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min_samples_leaf=1, min_samples_split=3, n_estimators=160;, score=0.398 total
time=
      2.7s
[CV 2/5; 344/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196
[CV 2/5; 343/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184;, score=0.419 total
time= 2.2s
[CV 3/5; 344/1000] START bootstrap=False, max_depth=11, max_features=None,
min samples leaf=2, min samples split=3, n estimators=196
[CV 1/5; 343/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184;, score=0.402 total
       2.2s
time=
[CV 4/5; 344/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196
[CV 4/5; 343/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184;, score=0.423 total
time=
       2.2s
[CV 5/5; 344/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196
[CV 1/5; 341/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160;, score=0.383 total
time= 3.0s
[CV 1/5; 345/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106
[CV 3/5; 343/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=184;, score=0.398 total
time=
      2.3s
[CV 2/5; 345/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106
[CV 3/5; 341/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160;, score=0.384 total
       2.8s
[CV 3/5; 345/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106
[CV 5/5; 341/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160;, score=0.379 total
time= 3.0s
[CV 4/5; 345/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106
[CV 4/5; 341/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=160;, score=0.362 total
       3.0s
time=
[CV 5/5; 345/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106
[CV 1/5; 345/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106;, score=0.405 total
time=
      1.6s
```

[CV 1/5; 346/1000] START bootstrap=True, max depth=12, max features=sqrt,

```
min_samples_leaf=2, min_samples_split=3, n_estimators=130
[CV 2/5; 345/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106;, score=0.392 total
time= 1.6s
[CV 2/5; 346/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=130
[CV 3/5; 345/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106;, score=0.391 total
time=
      1.6s
[CV 3/5; 346/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130
[CV 4/5; 345/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106;, score=0.388 total
time=
      1.4s
[CV 4/5; 346/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130
[CV 5/5; 345/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=106;, score=0.388 total
time=
      1.7s
[CV 5/5; 346/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=130
[CV 1/5; 346/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130;, score=0.393 total
time=
      1.0s
[CV 1/5; 347/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 2/5; 346/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130;, score=0.410 total
[CV 2/5; 347/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 3/5; 346/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130;, score=0.373 total
time=
      1.0s
[CV 3/5; 347/1000] START bootstrap=False, max depth=18, max features=None,
min samples leaf=3, min samples split=9, n estimators=48
[CV 4/5; 346/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130;, score=0.391 total
time= 1.0s
[CV 4/5; 347/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 5/5; 346/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=130;, score=0.413 total
time=
       1.0s
[CV 5/5; 347/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 4/5; 344/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196;, score=0.373 total
```

```
time=
        3.5s
[CV 1/5; 348/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8
[CV 1/5; 344/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=2, min samples split=3, n estimators=196;, score=0.395 total
time=
       3.9s
[CV 2/5; 348/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8
[CV 2/5; 344/1000] END bootstrap=False, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196;, score=0.366 total
time=
      3.8s
[CV 3/5; 348/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8
[CV 1/5; 348/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8;, score=0.386 total
time=
      0.2s
[CV 4/5; 348/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8
[CV 2/5; 347/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.372 total
time=
      1.1s
[CV 5/5; 348/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8
[CV 2/5; 348/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8;, score=0.348 total
time=
       0.2s
[CV 1/5; 349/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 3/5; 348/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8;, score=0.328 total
time=
      0.2s
[CV 2/5; 349/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 4/5; 348/1000] END bootstrap=False, max_depth=19, max_features=None,
min samples leaf=2, min samples split=4, n estimators=8;, score=0.350 total
time= 0.2s
[CV 3/5; 349/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 1/5; 347/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48;, score=0.386 total
time=
      1.3s
[CV 4/5; 349/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 3/5; 344/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196;, score=0.359 total
[CV 5/5; 349/1000] START bootstrap=True, max_depth=12, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=40

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[CV 5/5; 348/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=8;, score=0.357 total
time=
      0.2s
[CV 1/5; 350/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=3, min samples split=2, n estimators=38
[CV 4/5; 347/1000] END bootstrap=False, max depth=18, max features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.319 total
time= 1.2s
[CV 2/5; 350/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38
[CV 5/5; 344/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=196;, score=0.375 total
time=
      4.0s
[CV 3/5; 350/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38
[CV 3/5; 347/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48;, score=0.325 total
time= 1.4s
[CV 4/5; 350/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=3, min samples split=2, n estimators=38
[CV 3/5; 349/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=9, n estimators=40;, score=0.395 total
time= 0.5s
[CV 5/5; 350/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38
[CV 2/5; 349/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=9, n estimators=40;, score=0.394 total
time=
      0.5s
[CV 1/5; 349/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.427 total
time=
      0.6s
[CV 2/5; 351/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116
[CV 1/5; 351/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=9, n estimators=116
[CV 5/5; 347/1000] END bootstrap=False, max depth=18, max features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.365 total
time=
      1.3s
[CV 3/5; 351/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116
[CV 4/5; 349/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=40;, score=0.403 total
      0.5s
[CV 4/5; 351/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116
[CV 5/5; 349/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.379 total
```

0.6s

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[CV 5/5; 351/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116
[CV 2/5; 350/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38;, score=0.404 total
time= 0.6s
[CV 1/5; 352/1000] START bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=5, n estimators=184
[CV 1/5; 350/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=3, min samples split=2, n estimators=38;, score=0.404 total
time=
      0.6s
[CV 2/5; 352/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 3/5; 350/1000] END bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=2, n estimators=38;, score=0.384 total
       0.7s
[CV 3/5; 352/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 4/5; 350/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38;, score=0.375 total
time=
      0.7s
[CV 4/5; 352/1000] START bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=5, n estimators=184
[CV 5/5; 350/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=38;, score=0.378 total
time= 0.6s
[CV 5/5; 352/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 4/5; 351/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116;, score=0.373 total
time=
      2.4s
[CV 1/5; 353/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 3/5; 351/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116;, score=0.353 total
time=
      2.5s
[CV 2/5; 353/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=158
[CV 1/5; 351/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116;, score=0.385 total
time=
       2.5s
[CV 3/5; 353/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 2/5; 351/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=116;, score=0.378 total
time=
        2.6s
[CV 4/5; 353/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 5/5; 351/1000] END bootstrap=False, max_depth=12, max_features=None,
```

```
min_samples_leaf=3, min_samples_split=9, n_estimators=116;, score=0.376 total
time=
       2.5s
[CV 5/5; 353/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 1/5; 352/1000] END bootstrap=False, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.390 total
time= 3.5s
[CV 1/5; 354/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=2, min samples split=8, n estimators=170
[CV 5/5; 352/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.384 total
time=
       3.2s
[CV 2/5; 354/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170
[CV 1/5; 353/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.395 total
time=
      1.3s
[CV 3/5; 354/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170
[CV 2/5; 353/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=158;, score=0.400 total
time= 1.3s
[CV 4/5; 354/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170
[CV 3/5; 353/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.376 total
time=
      1.3s
[CV 5/5; 354/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170
[CV 2/5; 352/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.365 total
[CV 1/5; 355/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=96
[CV 5/5; 353/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.388 total
time= 1.3s
[CV 2/5; 355/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=96
[CV 4/5; 353/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.400 total
      1.3s
time=
[CV 3/5; 355/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=96
[CV 3/5; 352/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.354 total
time=
       3.7s
[CV 4/5; 355/1000] START bootstrap=False, max depth=8, max features=sqrt,
```

```
min_samples_leaf=2, min_samples_split=6, n_estimators=96
[CV 4/5; 352/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.366 total
      3.7s
[CV 5/5; 355/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=96
[CV 2/5; 355/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=96;, score=0.400 total
time=
      0.8s
[CV 1/5; 356/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102
[CV 1/5; 355/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=96;, score=0.408 total
time=
       0.9s
[CV 2/5; 356/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102
[CV 3/5; 355/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=96;, score=0.365 total
time=
      0.8s
[CV 3/5; 356/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=1, min samples split=2, n estimators=102
[CV 5/5; 355/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=96;, score=0.389 total
time=
      0.7s
[CV 4/5; 356/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102
[CV 4/5; 355/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=96;, score=0.391 total
[CV 5/5; 356/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102
[CV 2/5; 354/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170;, score=0.406 total
time=
       2.0s
[CV 1/5; 357/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=100
[CV 5/5; 354/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170;, score=0.389 total
time=
       2.1s
[CV 2/5; 357/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 1/5; 354/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170;, score=0.398 total
time=
       2.3s
[CV 3/5; 357/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 4/5; 354/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=170;, score=0.392 total
```

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time=
        2.3s
[CV 4/5; 357/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 3/5; 354/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=170;, score=0.401 total
time=
        2.3s
[CV 5/5; 357/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100
[CV 1/5; 357/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.414 total
time= 0.6s
[CV 1/5; 358/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106
[CV 2/5; 357/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.419 total
time=
      0.7s
[CV 2/5; 358/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106
[CV 4/5; 357/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=100;, score=0.411 total
time=
      0.7s
[CV 3/5; 358/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106
[CV 3/5; 357/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.384 total
time=
       0.7s
[CV 4/5; 358/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106
[CV 5/5; 357/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=100;, score=0.400 total
      0.7s
time=
[CV 5/5; 358/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106
[CV 4/5; 356/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=1, min samples split=2, n estimators=102;, score=0.362 total
       2.2s
time=
[CV 1/5; 359/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112
[CV 1/5; 358/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106;, score=0.417 total
time=
      0.6s
[CV 2/5; 359/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112
[CV 3/5; 356/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102;, score=0.351 total
[CV 3/5; 359/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112
```

```
[CV 1/5; 356/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102;, score=0.389 total
time=
       2.4s
[CV 4/5; 359/1000] START bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=5, n estimators=112
[CV 2/5; 356/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=1, min samples split=2, n estimators=102;, score=0.356 total
time=
       2.5s
[CV 5/5; 359/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112
[CV 2/5; 358/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106;, score=0.419 total
time=
      0.8s
[CV 1/5; 360/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=50
[CV 5/5; 356/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=102;, score=0.369 total
       2.5s
[CV 2/5; 360/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=50
[CV 3/5; 358/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=106;, score=0.378 total
time=
      0.8s
[CV 3/5; 360/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=50
[CV 5/5; 358/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106;, score=0.391 total
time=
       0.7s
[CV 4/5; 360/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=50
[CV 4/5; 358/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=106;, score=0.398 total
time=
      0.8s
[CV 5/5; 360/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=50
[CV 2/5; 360/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=50;, score=0.385 total
time=
      0.5s
[CV 1/5; 361/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 1/5; 359/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.418 total
      0.9s
[CV 2/5; 361/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 2/5; 359/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.422 total
time=
       0.8s
```

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[CV 3/5; 361/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 1/5; 360/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=50;, score=0.405 total
time= 0.6s
[CV 4/5; 361/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=126
[CV 3/5; 359/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=5, n estimators=112;, score=0.389 total
time=
      0.9s
[CV 5/5; 361/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 4/5; 359/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.392 total
       0.9s
[CV 1/5; 362/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 3/5; 360/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=50;, score=0.365 total
time=
      0.6s
[CV 2/5; 362/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=182
[CV 4/5; 360/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=50;, score=0.387 total
time= 0.6s
[CV 3/5; 362/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 5/5; 360/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=50;, score=0.384 total
time=
      0.6s
[CV 4/5; 362/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 5/5; 359/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=112;, score=0.403 total
time=
      1.0s
[CV 5/5; 362/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=182
[CV 1/5; 361/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.411 total
time= 0.6s
[CV 1/5; 363/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164
[CV 5/5; 361/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.408 total
time=
       0.6s
[CV 2/5; 363/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164
[CV 2/5; 361/1000] END bootstrap=False, max depth=5, max features=sqrt,
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min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.401 total
time=
      0.7s
[CV 3/5; 363/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164
[CV 3/5; 361/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.354 total
time= 0.7s
[CV 4/5; 363/1000] START bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=164
[CV 4/5; 361/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.375 total
       0.7s
time=
[CV 5/5; 363/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164
[CV 1/5; 363/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164;, score=0.411 total
time=
      1.4s
[CV 1/5; 364/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122
[CV 1/5; 362/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.404 total
time= 1.9s
[CV 2/5; 364/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122
[CV 2/5; 362/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.387 total
time=
      1.9s
[CV 3/5; 364/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122
[CV 4/5; 363/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164;, score=0.408 total
time= 1.4s
[CV 4/5; 364/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122
[CV 3/5; 363/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164;, score=0.370 total
time= 1.4s
[CV 5/5; 364/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122
[CV 2/5; 363/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164;, score=0.406 total
      1.4s
time=
[CV 1/5; 365/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 3/5; 362/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.398 total
time=
      1.9s
```

[CV 2/5; 365/1000] START bootstrap=False, max\_depth=16, max\_features=None,

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min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 4/5; 362/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.367 total
       2.0s
[CV 3/5; 365/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=4, n estimators=164
[CV 5/5; 362/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.395 total
time=
      1.9s
[CV 4/5; 365/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 5/5; 363/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=164;, score=0.392 total
time=
      1.4s
[CV 5/5; 365/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 1/5; 364/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122;, score=0.411 total
time=
      1.6s
[CV 1/5; 366/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=8, n estimators=20
[CV 2/5; 364/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122;, score=0.384 total
time=
      1.5s
[CV 2/5; 366/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=20
[CV 3/5; 364/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122;, score=0.357 total
[CV 3/5; 366/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=20
[CV 4/5; 364/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122;, score=0.370 total
time=
      1.6s
[CV 4/5; 366/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=8, n estimators=20
[CV 5/5; 364/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=122;, score=0.387 total
time= 1.6s
[CV 5/5; 366/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=20
[CV 1/5; 366/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=8, n estimators=20;, score=0.405 total
time=
      0.2s
[CV 1/5; 367/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22
[CV 2/5; 366/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=8, n estimators=20;, score=0.387 total
```

```
time=
        0.2s
[CV 2/5; 367/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22
[CV 3/5; 366/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=8, n estimators=20;, score=0.397 total
       0.2s
time=
[CV 3/5; 367/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22
[CV 4/5; 366/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=20;, score=0.367 total
time= 0.2s
[CV 4/5; 367/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22
[CV 5/5; 366/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=20;, score=0.394 total
time=
      0.2s
[CV 5/5; 367/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22
[CV 1/5; 367/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=8, n estimators=22;, score=0.405 total
time=
      0.2s
[CV 1/5; 368/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66
[CV 2/5; 367/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22;, score=0.387 total
time=
       0.2s
[CV 3/5; 367/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22;, score=0.397 total
[CV 2/5; 368/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66
[CV 3/5; 368/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66
[CV 4/5; 367/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=8, n estimators=22;, score=0.367 total
time= 0.2s
[CV 4/5; 368/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66
[CV 5/5; 367/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=22;, score=0.394 total
time=
      0.2s
[CV 5/5; 368/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66
[CV 3/5; 368/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66;, score=0.384 total
[CV 1/5; 369/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
```

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=168

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[CV 1/5; 368/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66;, score=0.393 total
time=
      0.5s
[CV 2/5; 369/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=168
[CV 2/5; 368/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=66;, score=0.407 total
time=
      0.5s
[CV 3/5; 369/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168
[CV 5/5; 368/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=66;, score=0.382 total
time=
      0.5s
[CV 4/5; 369/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168
[CV 4/5; 368/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=66;, score=0.397 total
time= 0.6s
[CV 5/5; 369/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=168
[CV 4/5; 365/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=4, n estimators=164;, score=0.331 total
time= 4.0s[CV 2/5; 365/1000] END bootstrap=False, max depth=16,
max_features=None, min_samples_leaf=3, min_samples_split=4, n_estimators=164;,
score=0.387 total time=
                          4.0s
[CV 1/5; 370/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 2/5; 370/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 1/5; 365/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.380 total
time=
      4.2s
[CV 3/5; 365/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=4, n estimators=164;, score=0.334 total
      4.2s
time=
[CV 3/5; 370/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 4/5; 370/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 1/5; 369/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168;, score=0.398 total
[CV 5/5; 370/1000] START bootstrap=False, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128
[CV 5/5; 365/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.363 total
```

4.4s

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[CV 1/5; 371/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152
[CV 2/5; 369/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168;, score=0.394 total
time= 2.3s
[CV 2/5; 371/1000] START bootstrap=False, max depth=20, max features=None,
min samples leaf=2, min samples split=7, n estimators=152
[CV 3/5; 369/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=168;, score=0.347 total
time=
       2.3s
[CV 3/5; 371/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152
[CV 4/5; 369/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168;, score=0.375 total
[CV 4/5; 371/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152
[CV 5/5; 369/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=168;, score=0.372 total
time=
       2.3s
[CV 5/5; 371/1000] START bootstrap=False, max depth=20, max features=None,
min samples leaf=2, min samples split=7, n estimators=152
[CV 5/5; 370/1000] END bootstrap=False, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.359 total
time=
       2.9s
[CV 1/5; 372/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174
[CV 4/5; 370/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.321 total
time=
      3.4s
[CV 2/5; 372/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174
[CV 2/5; 370/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.353 total
time=
      3.6s
[CV 3/5; 372/1000] START bootstrap=False, max depth=15, max features=None,
min samples leaf=1, min samples split=6, n estimators=174
[CV 1/5; 370/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.383 total
time=
      3.7s
[CV 4/5; 372/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174
[CV 3/5; 370/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=128;, score=0.329 total
time=
       3.5s
[CV 5/5; 372/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174
[CV 4/5; 371/1000] END bootstrap=False, max_depth=20, max_features=None,
```

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min_samples_leaf=2, min_samples_split=7, n_estimators=152;, score=0.341 total
time=
      3.4s
[CV 1/5; 373/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 1/5; 371/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152;, score=0.357 total
time= 4.4s
[CV 2/5; 373/1000] START bootstrap=False, max_depth=18, max_features=None,
min samples leaf=3, min samples split=9, n estimators=196
[CV 2/5; 371/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152;, score=0.353 total
       4.4s
time=
[CV 3/5; 373/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 3/5; 371/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152;, score=0.325 total
time=
      4.4s
[CV 4/5; 373/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 5/5; 371/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=152;, score=0.343 total
time= 4.3s
[CV 5/5; 373/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 1/5; 372/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174;, score=0.393 total
time=
      3.9s
[CV 1/5; 374/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 5/5; 372/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174;, score=0.379 total
[CV 2/5; 374/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 4/5; 372/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174;, score=0.340 total
time= 4.2s
[CV 3/5; 374/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 2/5; 372/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174;, score=0.367 total
      4.4s
time=
[CV 4/5; 374/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 3/5; 372/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=174;, score=0.337 total
time=
       4.4s
[CV 5/5; 374/1000] START bootstrap=True, max_depth=5, max_features=None,
```

```
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 1/5; 374/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.418 total
time= 0.9s
[CV 1/5; 375/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=3, n estimators=98
[CV 1/5; 373/1000] END bootstrap=False, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.386 total
time=
      4.5s
[CV 2/5; 375/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=98
[CV 2/5; 374/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.419 total
time=
      1.1s
[CV 3/5; 375/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=98
[CV 3/5; 374/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.392 total
time=
      1.1s
[CV 4/5; 375/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=3, n estimators=98
[CV 4/5; 374/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.373 total
time=
      1.1s
[CV 5/5; 375/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=98
[CV 5/5; 374/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.384 total
[CV 1/5; 376/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 1/5; 375/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=3, n estimators=98;, score=0.427 total
time=
      0.9s
[CV 2/5; 376/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=142
[CV 2/5; 375/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=98;, score=0.403 total
time= 0.8s
[CV 3/5; 376/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 1/5; 376/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.420 total
time=
      0.5s
[CV 4/5; 376/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 2/5; 376/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.426 total
```

```
0.7s
time=
[CV 5/5; 376/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 3/5; 375/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=3, n estimators=98;, score=0.404 total
time=
       1.0s
[CV 1/5; 377/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90
[CV 4/5; 373/1000] END bootstrap=False, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.321 total
time= 4.9s
[CV 2/5; 377/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90
[CV 4/5; 375/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=98;, score=0.407 total
time=
      1.1s
[CV 3/5; 377/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90
[CV 5/5; 375/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=3, n estimators=98;, score=0.414 total
time=
      1.0s
[CV 4/5; 377/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90
[CV 3/5; 376/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.385 total
time=
       0.6s
[CV 5/5; 377/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90
[CV 4/5; 376/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.407 total
time=
      0.6s
[CV 1/5; 378/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154
[CV 2/5; 373/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=3, min samples split=9, n estimators=196;, score=0.372 total
      5.3s
time=
[CV 2/5; 378/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154
[CV 5/5; 373/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.366 total
time=
      5.2s
[CV 3/5; 378/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154
[CV 5/5; 376/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.381 total
[CV 4/5; 378/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
```

min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=154

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[CV 3/5; 373/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.325 total
time=
       5.5s
[CV 5/5; 378/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=154
[CV 1/5; 377/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=90;, score=0.414 total
time=
      1.3s
[CV 1/5; 379/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122
[CV 2/5; 377/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=90;, score=0.394 total
time=
      1.4s
[CV 2/5; 379/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122
[CV 3/5; 377/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=90;, score=0.388 total
time= 1.3s
[CV 3/5; 379/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=4, n estimators=122
[CV 4/5; 377/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=90;, score=0.394 total
time= 1.4s
[CV 4/5; 379/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122
[CV 5/5; 377/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=7, n estimators=90;, score=0.387 total
time=
      1.4s
[CV 5/5; 379/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122
[CV 1/5; 378/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154;, score=0.411 total
time=
      1.7s
[CV 1/5; 380/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=166
[CV 2/5; 378/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=154;, score=0.372 total
time=
      1.9s
[CV 2/5; 380/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 3/5; 378/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154;, score=0.354 total
[CV 3/5; 380/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 5/5; 378/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154;, score=0.366 total
time=
       2.0s
```

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[CV 4/5; 380/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 4/5; 378/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=154;, score=0.373 total
time= 2.0s
[CV 5/5; 380/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=166
[CV 1/5; 380/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=166;, score=0.389 total
time=
      1.1s
[CV 1/5; 381/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 2/5; 380/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.417 total
[CV 2/5; 381/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 1/5; 379/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.386 total
time=
      2.2s
[CV 3/5; 381/1000] START bootstrap=False, max depth=17, max features=None,
min samples leaf=3, min samples split=2, n estimators=174
[CV 3/5; 380/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.381 total
time= 1.2s
[CV 4/5; 381/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 5/5; 380/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.388 total
time=
      1.1s
[CV 5/5; 381/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 2/5; 379/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.362 total
time=
      2.3s
[CV 1/5; 382/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=178
[CV 3/5; 379/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.332 total
time=
       2.3s
[CV 2/5; 382/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178
[CV 4/5; 380/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.403 total
time=
       1.3s
[CV 3/5; 382/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178
[CV 4/5; 379/1000] END bootstrap=False, max_depth=10, max_features=None,
```

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min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.353 total
time=
      2.3s
[CV 4/5; 382/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178
[CV 5/5; 379/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.360 total
time= 2.4s
[CV 5/5; 382/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=178
[CV 4/5; 382/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.381 total
time=
       1.3s
[CV 1/5; 383/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72
[CV 3/5; 382/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.370 total
time=
      1.4s
[CV 2/5; 383/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72
[CV 2/5; 382/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.411 total
time= 1.6s
[CV 3/5; 383/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72
[CV 1/5; 382/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.405 total
time=
      1.7s
[CV 4/5; 383/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72
[CV 5/5; 382/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.366 total
      1.8s
[CV 5/5; 383/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72
[CV 2/5; 383/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72;, score=0.428 total
time= 1.0s
[CV 1/5; 384/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 1/5; 383/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72;, score=0.387 total
      1.2s
time=
[CV 2/5; 384/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 4/5; 383/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=7, n estimators=72;, score=0.378 total
time=
      1.0s
```

[CV 3/5; 384/1000] START bootstrap=True, max\_depth=20, max\_features=None,

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min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 3/5; 383/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=7, n estimators=72;, score=0.376 total
time= 1.2s
[CV 4/5; 384/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=2, min samples split=8, n estimators=148
[CV 5/5; 383/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=72;, score=0.379 total
time=
      1.2s
[CV 5/5; 384/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 1/5; 381/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.380 total
time=
      4.4s
[CV 1/5; 385/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=24
[CV 1/5; 385/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24;, score=0.412 total
time=
      0.3s
[CV 2/5; 385/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24
[CV 4/5; 381/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.335 total
time=
      4.3s
[CV 3/5; 385/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=24
[CV 2/5; 385/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24;, score=0.372 total
[CV 4/5; 385/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=24
[CV 2/5; 381/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.376 total
time=
      4.6s
[CV 5/5; 385/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24
[CV 3/5; 381/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.347 total
time= 4.6s
[CV 1/5; 386/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46
[CV 3/5; 385/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24;, score=0.375 total
time=
       0.3s
[CV 2/5; 386/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46
[CV 4/5; 385/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24;, score=0.372 total
```

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0.3s
time=
[CV 3/5; 386/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46
[CV 5/5; 385/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=24;, score=0.375 total
time=
       0.3s
[CV 4/5; 386/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46
[CV 1/5; 386/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46;, score=0.398 total
time= 0.2s
[CV 5/5; 386/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46
[CV 2/5; 386/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46;, score=0.407 total
time=
      0.2s
[CV 1/5; 387/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100
[CV 5/5; 381/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=3, min samples split=2, n estimators=174;, score=0.365 total
time=
      4.7s
[CV 2/5; 387/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100
[CV 3/5; 386/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46;, score=0.400 total
time=
       0.2s
[CV 3/5; 387/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100
[CV 1/5; 384/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.383 total
time=
       2.2s
[CV 4/5; 387/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100
[CV 4/5; 386/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=46;, score=0.378 total
time= 0.2s
[CV 5/5; 387/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100
[CV 5/5; 386/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=46;, score=0.381 total
time=
      0.2s
[CV 1/5; 388/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90
[CV 2/5; 384/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.403 total
[CV 2/5; 388/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90
```

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[CV 3/5; 384/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.363 total
time=
       2.5s
[CV 3/5; 388/1000] START bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=5, n estimators=90
[CV 5/5; 384/1000] END bootstrap=True, max depth=20, max features=None,
min samples leaf=2, min samples split=8, n estimators=148;, score=0.370 total
time=
       2.4s
[CV 4/5; 388/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90
[CV 4/5; 384/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.372 total
time=
       2.6s
[CV 5/5; 388/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90
[CV 1/5; 387/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100;, score=0.423 total
time= 1.1s
[CV 1/5; 389/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=7, n estimators=114
[CV 2/5; 387/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=100;, score=0.406 total
time=
      1.1s
[CV 2/5; 389/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 3/5; 387/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100;, score=0.401 total
time=
      1.0s
[CV 3/5; 389/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 4/5; 387/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=100;, score=0.407 total
time= 1.0s
[CV 4/5; 389/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=7, n estimators=114
[CV 5/5; 387/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=100;, score=0.411 total
time=
      1.0s
[CV 5/5; 389/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114
[CV 1/5; 389/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.414 total
[CV 1/5; 390/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156
[CV 2/5; 389/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.400 total
```

1.2s

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[CV 2/5; 390/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156
[CV 3/5; 389/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.410 total
time= 1.2s
[CV 3/5; 390/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=156
[CV 4/5; 389/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=7, n estimators=114;, score=0.404 total
time=
      1.2s
[CV 4/5; 390/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156
[CV 5/5; 389/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=114;, score=0.391 total
[CV 5/5; 390/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156
[CV 2/5; 388/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90;, score=0.332 total
time=
      2.7s
[CV 1/5; 391/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=8
[CV 2/5; 390/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156;, score=0.413 total
time= 0.8s
[CV 2/5; 391/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 1/5; 391/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.392 total
time=
      0.1s
[CV 3/5; 391/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 2/5; 391/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.367 total
time= 0.1s
[CV 4/5; 391/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=8
[CV 3/5; 391/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.344 total
time=
      0.1s
[CV 5/5; 391/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8
[CV 3/5; 390/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156;, score=0.394 total
time=
       0.9s
[CV 1/5; 392/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 1/5; 390/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
```

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min_samples_leaf=2, min_samples_split=6, n_estimators=156;, score=0.393 total
time=
      1.0s
[CV 2/5; 392/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 4/5; 391/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.381 total
time= 0.1s
[CV 3/5; 392/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24
[CV 5/5; 391/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=8;, score=0.394 total
time=
       0.1s
[CV 4/5; 392/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24
[CV 4/5; 390/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156;, score=0.403 total
time=
      0.9s
[CV 5/5; 390/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=156;, score=0.388 total
time=
      0.9s
[CV 5/5; 392/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24
[CV 1/5; 393/1000] START bootstrap=True, max_depth=9, max_features=None,
min samples leaf=2, min samples split=3, n estimators=120
[CV 1/5; 388/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=5, n estimators=90;, score=0.339 total
time=
      3.1s
[CV 2/5; 393/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 4/5; 388/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90;, score=0.348 total
[CV 3/5; 393/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 3/5; 388/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=90;, score=0.357 total
time= 3.0s
[CV 4/5; 393/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 4/5; 392/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24;, score=0.350 total
      0.3s
time=
[CV 5/5; 393/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120
[CV 3/5; 392/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24;, score=0.357 total
time=
       0.3s
```

[CV 1/5; 394/1000] START bootstrap=True, max\_depth=7, max\_features=None,

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min_samples_leaf=3, min_samples_split=4, n_estimators=156
[CV 2/5; 392/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=24;, score=0.367 total
time= 0.4s
[CV 2/5; 394/1000] START bootstrap=True, max depth=7, max features=None,
min samples leaf=3, min samples split=4, n estimators=156
[CV 1/5; 392/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24;, score=0.387 total
time=
      0.4s
[CV 3/5; 394/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156
[CV 5/5; 392/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=24;, score=0.378 total
time=
      0.4s
[CV 4/5; 394/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156
[CV 5/5; 388/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=5, n estimators=90;, score=0.341 total
time=
      2.8s
[CV 5/5; 394/1000] START bootstrap=True, max depth=7, max features=None,
min samples leaf=3, min samples split=4, n estimators=156
[CV 4/5; 393/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.388 total
time=
      1.1s
[CV 1/5; 395/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 1/5; 393/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.402 total
[CV 2/5; 395/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 2/5; 393/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.404 total
time=
      1.3s
[CV 3/5; 395/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=42
[CV 3/5; 393/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.406 total
time= 1.3s
[CV 4/5; 395/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 1/5; 395/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.411 total
time=
      0.2s
[CV 5/5; 395/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=42
[CV 2/5; 395/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.408 total
```

```
0.2s
time=
[CV 1/5; 396/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 3/5; 395/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.376 total
time=
       0.2s
[CV 2/5; 396/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 5/5; 393/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=120;, score=0.388 total
time= 1.3s
[CV 3/5; 396/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 4/5; 395/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=42;, score=0.388 total
time= 0.2s
[CV 4/5; 396/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 3/5; 394/1000] END bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=4, n estimators=156;, score=0.392 total
time=
      1.4s
[CV 5/5; 396/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 2/5; 394/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156;, score=0.406 total
time=
       1.4s
[CV 1/5; 397/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 1/5; 394/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156;, score=0.412 total
time=
      1.5s
[CV 2/5; 397/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 5/5; 395/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=42;, score=0.401 total
time= 0.2s
[CV 3/5; 397/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 5/5; 394/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156;, score=0.388 total
time=
      1.4s
[CV 4/5; 397/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74
[CV 4/5; 394/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=156;, score=0.395 total
[CV 5/5; 397/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
```

min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=74

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[CV 1/5; 396/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.399 total
time=
      0.6s
[CV 2/5; 396/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.406 total
time=
      0.6s
[CV 1/5; 398/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100
[CV 2/5; 398/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100
[CV 4/5; 396/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.381 total
time=
      0.6s
[CV 3/5; 398/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100
[CV 3/5; 396/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.387 total
time= 0.6s
[CV 4/5; 398/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=100
[CV 5/5; 396/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.370 total
time=
      0.6s
[CV 5/5; 398/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100
[CV 2/5; 397/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74;, score=0.391 total
time=
      0.6s
[CV 1/5; 399/1000] START bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196
[CV 4/5; 397/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=74;, score=0.378 total
time=
      0.7s
[CV 2/5; 399/1000] START bootstrap=False, max_depth=20, max_features=None,
min samples leaf=2, min samples split=5, n estimators=196
[CV 1/5; 397/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=74;, score=0.379 total
time=
      0.8s
[CV 3/5; 399/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196
```

[CV 4/5; 399/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=196 [CV 5/5; 397/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt,

[CV 3/5; 397/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=74;, score=0.391 total

0.8s

min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=74;, score=0.394 total time= 0.8s

```
[CV 5/5; 399/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196
[CV 3/5; 398/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100;, score=0.360 total
time= 1.1s
[CV 1/5; 400/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=4, n estimators=152
[CV 2/5; 398/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=100;, score=0.370 total
time=
      1.2s
[CV 2/5; 400/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 1/5; 398/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100;, score=0.401 total
[CV 3/5; 400/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 4/5; 398/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100;, score=0.382 total
time=
      1.2s
[CV 4/5; 400/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=4, n estimators=152
[CV 5/5; 398/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=100;, score=0.370 total
time= 1.2s
[CV 5/5; 400/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 1/5; 400/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.396 total
time=
       2.2s
[CV 1/5; 401/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184
[CV 2/5; 400/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.403 total
time=
      2.5s
[CV 2/5; 401/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=3, min samples split=5, n estimators=184
[CV 4/5; 400/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.363 total
time=
       2.4s
[CV 3/5; 401/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184
[CV 3/5; 400/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.370 total
time=
       2.5s
[CV 4/5; 401/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184
[CV 5/5; 400/1000] END bootstrap=True, max depth=16, max features=None,
```

```
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.379 total
time=
       2.5s
[CV 5/5; 401/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184
[CV 1/5; 399/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196;, score=0.363 total
time= 5.4s
[CV 1/5; 402/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=156
[CV 3/5; 399/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196;, score=0.334 total
time=
       5.3s
[CV 2/5; 402/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 1/5; 401/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184;, score=0.402 total
time=
       2.3s
[CV 3/5; 402/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 4/5; 399/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196;, score=0.348 total
time= 5.3s
[CV 4/5; 402/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 2/5; 401/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184;, score=0.404 total
time=
      2.3s
[CV 5/5; 402/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156
[CV 5/5; 399/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196;, score=0.343 total
      5.6s
[CV 1/5; 403/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 2/5; 399/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=196;, score=0.344 total
time= 5.8s
[CV 2/5; 403/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 4/5; 401/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184;, score=0.397 total
       2.5s
time=
[CV 3/5; 403/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 3/5; 401/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184;, score=0.391 total
time=
       2.6s
```

[CV 4/5; 403/1000] START bootstrap=False, max\_depth=None, max\_features=None,

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min_samples_leaf=2, min_samples_split=6, n_estimators=150
[CV 5/5; 401/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=184;, score=0.391 total
       2.6s
[CV 5/5; 403/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=2, min samples split=6, n estimators=150
[CV 3/5; 402/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.375 total
time=
      1.0s
[CV 1/5; 404/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 2/5; 402/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.426 total
time=
       1.2s
[CV 2/5; 404/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 4/5; 402/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.404 total
time=
      1.2s
[CV 3/5; 404/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=56
[CV 1/5; 402/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.401 total
time=
      1.3s
[CV 4/5; 404/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 5/5; 402/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=156;, score=0.401 total
[CV 5/5; 404/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 1/5; 404/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.405 total
time=
      0.5s
[CV 1/5; 405/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=172
[CV 2/5; 404/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=56;, score=0.387 total
time= 0.6s
[CV 2/5; 405/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 3/5; 404/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.397 total
time=
       0.6s
[CV 3/5; 405/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 4/5; 404/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.367 total
```

```
0.6s
time=
[CV 4/5; 405/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 5/5; 404/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.394 total
time=
       0.5s
[CV 5/5; 405/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172
[CV 1/5; 405/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.412 total
time= 0.8s
[CV 1/5; 406/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 5/5; 405/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.413 total
time=
      0.8s
[CV 2/5; 406/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 3/5; 405/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=172;, score=0.353 total
time=
      1.0s
[CV 3/5; 406/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 2/5; 405/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.400 total
time=
       1.0s
[CV 4/5; 406/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 4/5; 405/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=172;, score=0.363 total
time=
      1.0s
[CV 5/5; 406/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150
[CV 1/5; 406/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=150;, score=0.402 total
time= 1.3s
[CV 1/5; 407/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 2/5; 406/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150;, score=0.394 total
time=
      1.2s
[CV 2/5; 407/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 1/5; 407/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.409 total
[CV 3/5; 407/1000] START bootstrap=True, max_depth=15, max_features=None,
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min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=22

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[CV 2/5; 407/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.413 total
time=
       0.3s
[CV 4/5; 407/1000] START bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=9, n estimators=22
[CV 3/5; 406/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=150;, score=0.375 total
time=
      1.4s
[CV 5/5; 407/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 4/5; 406/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150;, score=0.379 total
time=
      1.4s
[CV 1/5; 408/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=16
[CV 5/5; 406/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=150;, score=0.376 total
time= 1.4s
[CV 2/5; 408/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16
[CV 1/5; 408/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16;, score=0.412 total
time= 0.1s
[CV 3/5; 408/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=16
[CV 2/5; 408/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16;, score=0.373 total
time=
       0.1s
[CV 4/5; 408/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=16
[CV 4/5; 407/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.403 total
time=
      0.3s
[CV 5/5; 408/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16
[CV 3/5; 408/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16;, score=0.403 total
time=
      0.1s
[CV 1/5; 409/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 4/5; 408/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=16;, score=0.375 total
[CV 3/5; 407/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.394 total
[CV 3/5; 409/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
```

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[CV 2/5; 409/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 5/5; 408/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=16;, score=0.378 total
time= 0.1s
[CV 4/5; 409/1000] START bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=130
[CV 5/5; 407/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=9, n estimators=22;, score=0.382 total
time=
      0.3s
[CV 5/5; 409/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130
[CV 3/5; 403/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.348 total
[CV 1/5; 410/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 4/5; 403/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.356 total
time=
      4.5s
[CV 2/5; 410/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84
[CV 5/5; 403/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.344 total
time= 4.6s
[CV 3/5; 410/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 2/5; 403/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.331 total
time=
      4.8s
[CV 4/5; 410/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 1/5; 410/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84;, score=0.415 total
time=
      0.4s
[CV 5/5; 410/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84
[CV 1/5; 403/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=150;, score=0.330 total
time=
      5.1s
[CV 1/5; 411/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 2/5; 410/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84;, score=0.411 total
time=
       0.5s
[CV 2/5; 411/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
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[CV 3/5; 410/1000] END bootstrap=True, max\_depth=7, max\_features=sqrt,

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min samples leaf=1, min samples split=2, n estimators=84;, score=0.356 total
time=
      0.5s
[CV 3/5; 411/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 4/5; 410/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84;, score=0.387 total
time= 0.4s
[CV 4/5; 411/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=9, n estimators=104
[CV 5/5; 410/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84;, score=0.406 total
       0.4s
time=
[CV 5/5; 411/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104
[CV 4/5; 409/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.347 total
time=
       2.1s
[CV 1/5; 412/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50
[CV 2/5; 409/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=130;, score=0.373 total
time=
       2.3s
[CV 2/5; 412/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50
[CV 5/5; 409/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.373 total
time=
      2.2s
[CV 3/5; 412/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50
[CV 1/5; 412/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=3, n estimators=50;, score=0.421 total
time= 0.4s
[CV 4/5; 412/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50
[CV 3/5; 409/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.387 total
time=
       2.5s
[CV 5/5; 412/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50
[CV 1/5; 409/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=130;, score=0.374 total
       2.6s
time=
[CV 1/5; 413/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42
[CV 2/5; 412/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=3, n estimators=50;, score=0.423 total
time=
      0.4s
[CV 2/5; 413/1000] START bootstrap=True, max depth=16, max features=sqrt,
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min_samples_leaf=3, min_samples_split=8, n_estimators=42
[CV 3/5; 412/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=3, n estimators=50;, score=0.395 total
time= 0.4s
[CV 3/5; 413/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42
[CV 4/5; 412/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=50;, score=0.385 total
time=
      0.4s
[CV 4/5; 413/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42
[CV 5/5; 412/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=3, n estimators=50;, score=0.387 total
time=
       0.4s
[CV 5/5; 413/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42
[CV 1/5; 413/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42;, score=0.389 total
time=
      0.4s
[CV 1/5; 414/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=4
[CV 2/5; 413/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42;, score=0.423 total
time=
      0.3s
[CV 2/5; 414/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4
[CV 1/5; 411/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=104;, score=0.386 total
[CV 3/5; 414/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4
[CV 1/5; 414/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4;, score=0.376 total
time=
      0.0s
[CV 2/5; 414/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4;, score=0.353 total
time= 0.0s
[CV 4/5; 414/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4
[CV 5/5; 414/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4
[CV 5/5; 414/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4;, score=0.391 total
      0.0s
time=
[CV 1/5; 415/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=128
[CV 3/5; 414/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=4;, score=0.397 total
```

time= 0.0s [CV 4/5; 414/1000] END bootstrap=True, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=4;, score=0.365 total time= 0.0s [CV 2/5; 415/1000] START bootstrap=False, max depth=16, max features=None, min samples leaf=1, min samples split=2, n estimators=128 [CV 3/5; 415/1000] START bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=128 [CV 5/5; 411/1000] END bootstrap=False, max depth=10, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=104;, score=0.360 total time= 1.7s [CV 4/5; 415/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=128 [CV 2/5; 411/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=104;, score=0.367 total time= 2.0s [CV 5/5; 415/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=128 [CV 4/5; 411/1000] END bootstrap=False, max\_depth=10, max\_features=None, min samples leaf=2, min samples split=9, n estimators=104;, score=0.347 total time= 1.9s [CV 1/5; 416/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2 [CV 3/5; 413/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=42;, score=0.384 total time= 0.4s[CV 2/5; 416/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2 [CV 1/5; 416/1000] END bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2;, score=0.405 total time= 0.0s [CV 3/5; 416/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2 [CV 2/5; 416/1000] END bootstrap=False, max\_depth=9, max\_features=sqrt, min samples leaf=2, min samples split=6, n estimators=2;, score=0.388 total time= 0.0s[CV 4/5; 416/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2 [CV 3/5; 416/1000] END bootstrap=False, max\_depth=9, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2;, score=0.360 total time= 0.0s [CV 5/5; 416/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2 [CV 4/5; 416/1000] END bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=2;, score=0.389 total [CV 3/5; 411/1000] END bootstrap=False, max\_depth=10, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=104;, score=0.331 total

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time=
        2.0s
[CV 1/5; 417/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 2/5; 417/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94
[CV 5/5; 416/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=2;, score=0.357 total
time= 0.0s
[CV 3/5; 417/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 4/5; 413/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42;, score=0.426 total
time=
      0.4s
[CV 4/5; 417/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 5/5; 413/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42;, score=0.401 total
time= 0.5s
[CV 5/5; 417/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94
[CV 3/5; 417/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.398 total
time= 0.8s
[CV 1/5; 418/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170
[CV 2/5; 417/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.387 total
time=
      1.0s
[CV 2/5; 418/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170
[CV 1/5; 417/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94;, score=0.405 total
time=
      1.0s
[CV 3/5; 418/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=170
[CV 4/5; 417/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.367 total
time=
      1.0s
[CV 4/5; 418/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170
[CV 5/5; 417/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.395 total
[CV 5/5; 418/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170
[CV 1/5; 418/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170;, score=0.380 total
time=
      1.5s
```

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[CV 1/5; 419/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144
[CV 2/5; 418/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170;, score=0.398 total
time= 1.6s
[CV 2/5; 419/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=144
[CV 5/5; 418/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=170;, score=0.384 total
time=
      1.4s
[CV 3/5; 419/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144
[CV 3/5; 418/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170;, score=0.372 total
[CV 4/5; 419/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144
[CV 4/5; 418/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=170;, score=0.389 total
time=
      1.6s
[CV 5/5; 419/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=144
[CV 1/5; 415/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=2, n estimators=128;, score=0.383 total
time=
       2.8s
[CV 1/5; 420/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126
[CV 5/5; 415/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=128;, score=0.344 total
time=
       3.4s
[CV 2/5; 420/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126
[CV 4/5; 415/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=128;, score=0.319 total
time=
      3.4s
[CV 3/5; 420/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=126
[CV 3/5; 415/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=128;, score=0.328 total
time=
       3.5s
[CV 4/5; 420/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126
[CV 2/5; 415/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=128;, score=0.379 total
time=
       3.5s
[CV 5/5; 420/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126
[CV 1/5; 419/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
```

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min_samples_leaf=1, min_samples_split=9, n_estimators=144;, score=0.408 total
time=
      1.5s
[CV 1/5; 421/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18
[CV 3/5; 419/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144;, score=0.365 total
time= 1.4s
[CV 2/5; 421/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=18
[CV 2/5; 419/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144;, score=0.400 total
       1.4s
time=
[CV 3/5; 421/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18
[CV 1/5; 421/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=18;, score=0.371 total
time=
      0.1s
[CV 4/5; 421/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18
[CV 2/5; 421/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=18;, score=0.392 total
time= 0.1s
[CV 5/5; 421/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18
[CV 5/5; 419/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144;, score=0.391 total
time=
      1.5s
[CV 1/5; 422/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188
[CV 4/5; 419/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=144;, score=0.381 total
      1.5s
[CV 2/5; 422/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188
[CV 4/5; 421/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18;, score=0.370 total
time= 0.1s
[CV 3/5; 422/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188
[CV 3/5; 421/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=18;, score=0.392 total
      0.2s
time=
[CV 4/5; 422/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188
[CV 5/5; 421/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=18;, score=0.381 total
time=
       0.2s
[CV 5/5; 422/1000] START bootstrap=False, max depth=5, max features=sqrt,
```

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min_samples_leaf=1, min_samples_split=9, n_estimators=188
[CV 1/5; 420/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126;, score=0.374 total
      1.8s
[CV 1/5; 423/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=110
[CV 3/5; 422/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188;, score=0.351 total
time=
      0.9s
[CV 2/5; 423/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=110
[CV 3/5; 420/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126;, score=0.350 total
time=
       1.7s
[CV 3/5; 423/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=110
[CV 1/5; 422/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188;, score=0.412 total
time=
      1.1s
[CV 4/5; 423/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=110
[CV 2/5; 422/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188;, score=0.398 total
time=
      1.1s
[CV 5/5; 423/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=110
[CV 4/5; 422/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188;, score=0.359 total
[CV 1/5; 424/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 4/5; 420/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126;, score=0.356 total
time=
      1.9s
[CV 2/5; 424/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=8, n estimators=172
[CV 2/5; 420/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126;, score=0.376 total
       2.0s
time=
[CV 3/5; 424/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 5/5; 420/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=126;, score=0.366 total
       2.0s
time=
[CV 4/5; 424/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 5/5; 422/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=188;, score=0.411 total
```

time= 1.1s [CV 5/5; 424/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=172 [CV 1/5; 423/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=110;, score=0.404 total time= 1.5s [CV 1/5; 425/1000] START bootstrap=False, max depth=11, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108 [CV 2/5; 423/1000] END bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=110;, score=0.391 total time= 1.2s [CV 2/5; 425/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108 [CV 3/5; 423/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=110;, score=0.348 total time= 1.5s [CV 3/5; 425/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108 [CV 4/5; 423/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=110;, score=0.376 total time= 1.5s [CV 4/5; 425/1000] START bootstrap=False, max depth=11, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108 [CV 5/5; 423/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=110;, score=0.367 total time= 1.5s [CV 5/5; 425/1000] START bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108 [CV 1/5; 425/1000] END bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108;, score=0.418 total time= 1.0s [CV 1/5; 426/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=66 [CV 2/5; 425/1000] END bootstrap=False, max\_depth=11, max\_features=sqrt, min samples leaf=3, min samples split=3, n estimators=108;, score=0.404 total time= 1.0s[CV 2/5; 426/1000] START bootstrap=False, max depth=None, max features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=66 [CV 3/5; 425/1000] END bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108;, score=0.372 total time= 1.2s [CV 3/5; 426/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=66 [CV 4/5; 425/1000] END bootstrap=False, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=108;, score=0.375 total [CV 4/5; 426/1000] START bootstrap=False, max\_depth=None, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=66

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[CV 5/5; 425/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=108;, score=0.395 total
time=
       1.2s
[CV 5/5; 426/1000] START bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=6, n estimators=66
[CV 1/5; 424/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=8, n estimators=172;, score=0.409 total
time=
       2.8s
[CV 1/5; 427/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172
[CV 2/5; 424/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.395 total
time=
       2.8s
[CV 2/5; 427/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172
[CV 4/5; 424/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.375 total
       2.8s
[CV 3/5; 427/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=172
[CV 5/5; 424/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=8, n estimators=172;, score=0.376 total
time=
      2.8s
[CV 4/5; 427/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172
[CV 3/5; 424/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.366 total
time=
       2.9s
[CV 5/5; 427/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172
[CV 2/5; 426/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=66;, score=0.334 total
time=
      1.9s
[CV 1/5; 428/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=150
[CV 1/5; 426/1000] END bootstrap=False, max depth=None, max features=None,
min samples leaf=1, min samples split=6, n estimators=66;, score=0.339 total
time=
       2.1s
[CV 2/5; 428/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150
[CV 2/5; 427/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172;, score=0.411 total
[CV 3/5; 428/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150
[CV 1/5; 427/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172;, score=0.417 total
```

time=

1.2s

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[CV 4/5; 428/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150
[CV 3/5; 427/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172;, score=0.395 total
time= 1.1s
[CV 5/5; 428/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=150
[CV 4/5; 427/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=172;, score=0.408 total
time=
      1.2s
[CV 1/5; 429/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150
[CV 5/5; 427/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=172;, score=0.400 total
[CV 2/5; 429/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150
[CV 4/5; 426/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=66;, score=0.348 total
time=
      2.0s
[CV 3/5; 429/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=150
[CV 5/5; 426/1000] END bootstrap=False, max depth=None, max features=None,
min samples leaf=1, min samples split=6, n estimators=66;, score=0.346 total
time=
       2.0s
[CV 4/5; 429/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150
[CV 3/5; 426/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=6, n estimators=66;, score=0.357 total
time=
       2.2s
[CV 5/5; 429/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150
[CV 1/5; 428/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.401 total
time=
      1.1s
[CV 1/5; 430/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=134
[CV 2/5; 428/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.408 total
time=
      1.2s
[CV 2/5; 430/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134
[CV 4/5; 428/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.389 total
time=
       1.3s
[CV 3/5; 430/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134
[CV 5/5; 428/1000] END bootstrap=True, max depth=15, max features=sqrt,
```

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min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.394 total
time=
      1.3s
[CV 4/5; 430/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134
[CV 3/5; 428/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.388 total
time= 1.3s
[CV 5/5; 430/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=134
[CV 2/5; 429/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150;, score=0.403 total
       1.3s[CV 1/5; 429/1000] END bootstrap=True, max_depth=16,
max_features=sqrt, min_samples_leaf=2, min_samples_split=7, n_estimators=150;,
score=0.405 total time=
                          1.3s
[CV 1/5; 431/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18
[CV 2/5; 431/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18
[CV 1/5; 431/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18;, score=0.383 total
time= 0.2s
[CV 2/5; 431/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18;, score=0.366 total
time= 0.2s
[CV 3/5; 431/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18
[CV 4/5; 431/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18
[CV 3/5; 431/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18;, score=0.350 total
[CV 4/5; 431/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18;, score=0.388 total
time= 0.2s
[CV 5/5; 431/1000] START bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=18
[CV 1/5; 432/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 3/5; 429/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150;, score=0.370 total
      1.3s
time=
[CV 2/5; 432/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 4/5; 429/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150;, score=0.403 total
time=
      1.3s
[CV 3/5; 432/1000] START bootstrap=True, max_depth=8, max_features=None,
```

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min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 5/5; 429/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=150;, score=0.379 total
time=
      1.3s
[CV 4/5; 432/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=9, n estimators=48
[CV 5/5; 431/1000] END bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=18;, score=0.389 total
time=
      0.2s
[CV 5/5; 432/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48
[CV 1/5; 430/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134;, score=0.404 total
time=
      1.1s
[CV 1/5; 433/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94
[CV 2/5; 430/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134;, score=0.403 total
time=
      1.1s
[CV 2/5; 433/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=94
[CV 1/5; 432/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48;, score=0.424 total
time=
      0.5s
[CV 3/5; 433/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94
[CV 3/5; 432/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.394 total
[CV 4/5; 433/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94
[CV 4/5; 432/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.395 total
time=
      0.5s
[CV 5/5; 433/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=94
[CV 4/5; 430/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134;, score=0.394 total
time= 1.2s
[CV 1/5; 434/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108
[CV 2/5; 432/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=9, n estimators=48;, score=0.408 total
time=
      0.5s
[CV 3/5; 430/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=134;, score=0.372 total
time=
      1.3s
[CV 2/5; 434/1000] START bootstrap=True, max_depth=8, max_features=None,
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min_samples_leaf=2, min_samples_split=2, n_estimators=108
[CV 3/5; 434/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108
[CV 5/5; 430/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=134;, score=0.385 total
time=
       1.3s
[CV 4/5; 434/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108
[CV 5/5; 432/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=48;, score=0.370 total
time= 0.6s
[CV 5/5; 434/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108
[CV 1/5; 433/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94;, score=0.436 total
time=
      0.5s
[CV 1/5; 435/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92
[CV 2/5; 433/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=94;, score=0.407 total
time= 0.5s
[CV 2/5; 435/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92
[CV 3/5; 433/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94;, score=0.410 total
time=
       0.6s
[CV 3/5; 435/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92
[CV 5/5; 433/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=94;, score=0.395 total
time=
      0.5s
[CV 4/5; 435/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92
[CV 4/5; 433/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=94;, score=0.397 total
time= 0.6s
[CV 5/5; 435/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92
[CV 1/5; 435/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92;, score=0.406 total
time=
      0.8s
[CV 1/5; 436/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 1/5; 434/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108;, score=0.412 total
[CV 2/5; 436/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
```

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[CV 2/5; 435/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92;, score=0.401 total
time=
      0.8s
[CV 3/5; 436/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=46
[CV 4/5; 434/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=2, n estimators=108;, score=0.397 total
time=
      1.1s
[CV 4/5; 436/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 2/5; 434/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108;, score=0.406 total
time=
      1.1s
[CV 5/5; 436/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 3/5; 434/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=108;, score=0.411 total
time= 1.1s
[CV 1/5; 437/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=124
[CV 5/5; 434/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=2, n estimators=108;, score=0.387 total
time=
      1.2s
[CV 2/5; 437/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124
[CV 3/5; 435/1000] END bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=92;, score=0.367 total
time=
      0.9s
[CV 3/5; 437/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124
[CV 4/5; 435/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=92;, score=0.385 total
time=
      0.9s
[CV 4/5; 437/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=124
[CV 5/5; 435/1000] END bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=92;, score=0.387 total
time=
      0.8s
[CV 5/5; 437/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124
[CV 1/5; 436/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.412 total
      0.5s
[CV 1/5; 438/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 2/5; 436/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.398 total
time=
       0.6s
```

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[CV 2/5; 438/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 3/5; 436/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=46;, score=0.397 total
time= 0.6s
[CV 3/5; 438/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=114
[CV 4/5; 436/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.394 total
time=
      0.6s
[CV 4/5; 438/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 5/5; 436/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.379 total
[CV 5/5; 438/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 1/5; 438/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.417 total
time=
      0.6s
[CV 1/5; 439/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=6, n estimators=192
[CV 3/5; 437/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124;, score=0.381 total
time= 0.9s
[CV 2/5; 439/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192
[CV 1/5; 437/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124;, score=0.390 total
time=
      1.2s
[CV 3/5; 439/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192
[CV 2/5; 438/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.420 total
time=
      0.7s
[CV 4/5; 439/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=1, min samples split=6, n estimators=192
[CV 4/5; 438/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.400 total
time=
      0.7s
[CV 5/5; 439/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192
[CV 3/5; 438/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.392 total
time=
       0.7s
[CV 1/5; 440/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64
[CV 2/5; 437/1000] END bootstrap=True, max depth=16, max features=sqrt,
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min_samples_leaf=1, min_samples_split=2, n_estimators=124;, score=0.397 total
time=
      1.2s
[CV 2/5; 440/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64
[CV 5/5; 438/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.410 total
time= 0.7s
[CV 3/5; 440/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=4, n estimators=64
[CV 5/5; 437/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124;, score=0.370 total
time=
       1.1s
[CV 4/5; 440/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64
[CV 4/5; 437/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=124;, score=0.381 total
time=
      1.3s
[CV 5/5; 440/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64
[CV 1/5; 440/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64;, score=0.408 total
time= 0.6s
[CV 1/5; 441/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 1/5; 441/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.449 total
time=
      0.1s
[CV 2/5; 441/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 2/5; 441/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.378 total
time= 0.1s
[CV 3/5; 441/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 2/5; 440/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=64;, score=0.401 total
time= 0.8s
[CV 4/5; 441/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 3/5; 441/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.379 total
      0.1s
time=
[CV 5/5; 441/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 3/5; 440/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=4, n estimators=64;, score=0.384 total
time=
       0.8s
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[CV 1/5; 442/1000] START bootstrap=True, max depth=17, max features=sqrt,

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min_samples_leaf=1, min_samples_split=8, n_estimators=196
[CV 4/5; 440/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=4, n estimators=64;, score=0.398 total
time= 0.8s
[CV 2/5; 442/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196
[CV 5/5; 441/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.397 total
      0.1s[CV 4/5; 441/1000] END bootstrap=False, max depth=10,
max_features=sqrt, min_samples_leaf=1, min_samples_split=9, n_estimators=6;,
score=0.372 total time=
                          0.1s
[CV 3/5; 442/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196
[CV 4/5; 442/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196
[CV 5/5; 440/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=4, n estimators=64;, score=0.388 total
time=
      0.8s
[CV 5/5; 442/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196
[CV 1/5; 439/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192;, score=0.398 total
time=
      1.8s
[CV 1/5; 443/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68
[CV 2/5; 439/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192;, score=0.419 total
[CV 2/5; 443/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68
[CV 3/5; 439/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192;, score=0.407 total
time=
       2.0s
[CV 3/5; 443/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68
[CV 4/5; 439/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192;, score=0.391 total
time=
       2.0s
[CV 4/5; 443/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68
[CV 5/5; 439/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=192;, score=0.385 total
time=
       2.0s
[CV 5/5; 443/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68
[CV 1/5; 443/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=68;, score=0.387 total
```

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0.9s
time=
[CV 1/5; 444/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 4/5; 442/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196;, score=0.388 total
time=
       1.7s
[CV 2/5; 444/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 1/5; 442/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.414 total
time= 1.7s
[CV 3/5; 444/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 3/5; 442/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.360 total
time=
      1.7s
[CV 4/5; 444/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 2/5; 442/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=196;, score=0.411 total
time=
      1.8s
[CV 5/5; 444/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 5/5; 442/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=196;, score=0.406 total
time=
       1.8s
[CV 1/5; 445/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 2/5; 443/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68;, score=0.397 total
time=
      0.9s
[CV 2/5; 445/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 3/5; 443/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=68;, score=0.348 total
time= 0.9s
[CV 3/5; 445/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 4/5; 443/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68;, score=0.394 total
time=
      0.9s
[CV 4/5; 445/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180
[CV 5/5; 443/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=68;, score=0.372 total
[CV 5/5; 445/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
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min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=180

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[CV 2/5; 445/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.413 total
time=
      1.6s
[CV 1/5; 446/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=72
[CV 4/5; 445/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=180;, score=0.398 total
time=
      1.5s
[CV 3/5; 445/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.370 total
time= 1.6s
[CV 2/5; 446/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=72
[CV 3/5; 446/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=72
[CV 1/5; 444/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.382 total
       2.1s
[CV 4/5; 446/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=72
[CV 1/5; 445/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=180;, score=0.398 total
time=
      1.7s
[CV 5/5; 446/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=72
[CV 5/5; 445/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=180;, score=0.379 total
time=
       1.6s
[CV 1/5; 447/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 4/5; 444/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.357 total
time= 1.9s
[CV 2/5; 447/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=138
[CV 3/5; 444/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=4, n estimators=132;, score=0.350 total
time=
      1.9s
[CV 3/5; 447/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 2/5; 444/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.372 total
       2.0s
[CV 4/5; 447/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 5/5; 444/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.369 total
time=
       2.1s
```

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[CV 5/5; 447/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138
[CV 2/5; 447/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.407 total
time= 0.8s
[CV 1/5; 448/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=14
[CV 3/5; 447/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=138;, score=0.416 total
time=
      0.8s
[CV 2/5; 448/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=14
[CV 1/5; 448/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=14;, score=0.393 total
[CV 3/5; 448/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=14
[CV 1/5; 447/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.411 total
time=
      0.9s
[CV 4/5; 448/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=14
[CV 2/5; 448/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=14;, score=0.406 total
time= 0.1s
[CV 5/5; 448/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=14
[CV 3/5; 448/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=14;, score=0.387 total
time=
      0.1s
[CV 1/5; 449/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 4/5; 447/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.422 total
time=
      0.9s
[CV 2/5; 449/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=2, min samples split=6, n estimators=112
[CV 4/5; 446/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=72;, score=0.362 total
time=
      1.1s
[CV 3/5; 449/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 4/5; 448/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=14;, score=0.382 total
time=
      0.1s
[CV 4/5; 449/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 5/5; 448/1000] END bootstrap=True, max depth=11, max features=sqrt,
```

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min samples leaf=3, min samples split=2, n estimators=14;, score=0.379 total
time=
      0.1s
[CV 5/5; 449/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 5/5; 447/1000] END bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=138;, score=0.392 total
time= 0.9s
[CV 1/5; 450/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=158
[CV 2/5; 446/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=72;, score=0.400 total
       1.2s
time=
[CV 2/5; 450/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 1/5; 446/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=4, n estimators=72;, score=0.402 total
time=
      1.3s
[CV 3/5; 450/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 5/5; 446/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=4, n estimators=72;, score=0.387 total
time= 1.2s
[CV 4/5; 450/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=158
[CV 3/5; 446/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=72;, score=0.385 total
time=
      1.3s
[CV 5/5; 450/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158
[CV 1/5; 450/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.411 total
      0.7s
[CV 1/5; 451/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154
[CV 3/5; 450/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.378 total
time= 0.7s
[CV 2/5; 451/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154
[CV 2/5; 450/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.414 total
      0.7s
time=
[CV 3/5; 451/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154
[CV 4/5; 450/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.382 total
time=
      0.7s
[CV 4/5; 451/1000] START bootstrap=False, max_depth=12, max_features=None,
```

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min_samples_leaf=2, min_samples_split=9, n_estimators=154
[CV 5/5; 450/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=158;, score=0.391 total
time= 0.7s
[CV 5/5; 451/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=9, n estimators=154
[CV 1/5; 449/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.367 total
time=
      1.6s
[CV 1/5; 452/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162
[CV 5/5; 449/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.362 total
time=
       1.6s
[CV 2/5; 452/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162
[CV 2/5; 449/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.366 total
time=
      2.0s
[CV 3/5; 452/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=9, n estimators=162
[CV 3/5; 449/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.348 total
time=
      1.9s
[CV 4/5; 452/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162
[CV 4/5; 449/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.348 total
[CV 5/5; 452/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162
[CV 2/5; 452/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162;, score=0.376 total
time=
       2.2s
[CV 1/5; 453/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=48
[CV 3/5; 451/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154;, score=0.356 total
time= 3.2s
[CV 2/5; 453/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=48
[CV 2/5; 451/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154;, score=0.379 total
time=
       3.3s
[CV 3/5; 453/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=48
[CV 1/5; 451/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=154;, score=0.385 total
```

time= 3.3s[CV 4/5; 453/1000] START bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48 [CV 4/5; 451/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=2, min samples split=9, n estimators=154;, score=0.369 total time= 3.2s [CV 5/5; 453/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48 [CV 1/5; 452/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=162;, score=0.380 total time= 2.5s [CV 1/5; 454/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=24 [CV 1/5; 453/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48;, score=0.405 total time= 0.4s[CV 2/5; 454/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=24 [CV 5/5; 451/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=2, min samples split=9, n estimators=154;, score=0.365 total time= 3.3s [CV 3/5; 454/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=24 [CV 2/5; 453/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48;, score=0.407 total time= 0.4s[CV 4/5; 454/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=24 [CV 3/5; 452/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=162;, score=0.347 total time= 2.4s[CV 5/5; 454/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=24 [CV 4/5; 453/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min samples leaf=3, min samples split=5, n estimators=48;, score=0.408 total time= 0.3s[CV 1/5; 455/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=78 [CV 3/5; 453/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48;, score=0.385 total time= 0.4s[CV 2/5; 455/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=78 [CV 5/5; 453/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=48;, score=0.375 total [CV 4/5; 452/1000] END bootstrap=False, max\_depth=8, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=162;, score=0.356 total

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time=
        2.5s
[CV 3/5; 455/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 4/5; 455/1000] START bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=6, n estimators=78
[CV 1/5; 454/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=3, min samples split=2, n estimators=24;, score=0.396 total
time=
      0.3s
[CV 5/5; 455/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 2/5; 454/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=3, min samples split=2, n estimators=24;, score=0.378 total
time=
      0.3s
[CV 1/5; 456/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118
[CV 3/5; 454/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=24;, score=0.343 total
time= 0.3s
[CV 2/5; 456/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=8, n estimators=118
[CV 5/5; 454/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=3, min samples split=2, n estimators=24;, score=0.365 total
time=
      0.3s
[CV 3/5; 456/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118
[CV 5/5; 452/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=162;, score=0.366 total
time=
       2.7s
[CV 4/5; 456/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118
[CV 4/5; 454/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=24;, score=0.362 total
time=
      0.3s
[CV 5/5; 456/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=8, n estimators=118
[CV 2/5; 455/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.392 total
time=
      1.0s
[CV 1/5; 457/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196
[CV 1/5; 455/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.398 total
[CV 2/5; 457/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196
[CV 4/5; 455/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=78;, score=0.384 total
time=
      1.1s
```

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[CV 3/5; 457/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196
[CV 3/5; 455/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=78;, score=0.394 total
time= 1.1s
[CV 4/5; 457/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=196
[CV 5/5; 455/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=6, n estimators=78;, score=0.398 total
time=
      1.1s
[CV 5/5; 457/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196
[CV 3/5; 456/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118;, score=0.416 total
[CV 1/5; 458/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122
[CV 1/5; 456/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118;, score=0.418 total
time=
      1.2s
[CV 2/5; 458/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=122
[CV 2/5; 456/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118;, score=0.403 total
time= 1.2s
[CV 3/5; 458/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122
[CV 4/5; 456/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118;, score=0.398 total
time=
      1.2s
[CV 4/5; 458/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122
[CV 5/5; 456/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=118;, score=0.398 total
time=
      1.4s
[CV 5/5; 458/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=122
[CV 1/5; 457/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196;, score=0.398 total
time=
      1.4s
[CV 1/5; 459/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 1/5; 458/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122;, score=0.399 total
time=
       1.1s
[CV 2/5; 459/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 4/5; 458/1000] END bootstrap=True, max depth=18, max features=sqrt,
```

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min_samples_leaf=2, min_samples_split=6, n_estimators=122;, score=0.400 total
time=
      1.0s
[CV 3/5; 459/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 2/5; 458/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122;, score=0.406 total
time= 1.1s
[CV 4/5; 459/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=164
[CV 3/5; 458/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122;, score=0.363 total
       1.2s
time=
[CV 5/5; 459/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164
[CV 2/5; 457/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196;, score=0.416 total
time=
      1.4s
[CV 1/5; 460/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 5/5; 458/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=122;, score=0.389 total
time= 1.0s
[CV 2/5; 460/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 1/5; 460/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.376 total
time=
      0.1s
[CV 3/5; 460/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 5/5; 457/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196;, score=0.389 total
      1.5s
[CV 2/5; 460/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.388 total
time= 0.1s
[CV 4/5; 460/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10
[CV 5/5; 460/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 3/5; 457/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196;, score=0.375 total
      1.5s
time=
[CV 1/5; 461/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196
[CV 4/5; 457/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=196;, score=0.403 total
time=
      1.5s
[CV 2/5; 461/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
```

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min_samples_leaf=2, min_samples_split=7, n_estimators=196
[CV 5/5; 460/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.391 total
time= 0.1s
[CV 3/5; 461/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=196
[CV 3/5; 460/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.369 total
time=
      0.1s
[CV 4/5; 461/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196
[CV 4/5; 460/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.416 total
time=
       0.1s
[CV 5/5; 461/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196
[CV 1/5; 461/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196;, score=0.411 total
time=
      0.8s
[CV 1/5; 462/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=4, n estimators=12
[CV 2/5; 461/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196;, score=0.413 total
time=
      0.8s
[CV 2/5; 462/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12
[CV 5/5; 461/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196;, score=0.397 total
       0.8s[CV 4/5; 461/1000] END bootstrap=True, max_depth=5,
max_features=sqrt, min_samples_leaf=2, min_samples_split=7, n_estimators=196;,
score=0.401 total time=
                          0.8s
[CV 3/5; 462/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=4, n estimators=12
[CV 4/5; 462/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=4, n estimators=12
[CV 3/5; 461/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=196;, score=0.378 total
time= 0.9s
[CV 5/5; 462/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12
[CV 1/5; 462/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=4, n estimators=12;, score=0.386 total
time=
      0.2s
[CV 1/5; 463/1000] START bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124
[CV 2/5; 462/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12;, score=0.426 total
```

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time=
        0.2s
[CV 2/5; 463/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124
[CV 4/5; 462/1000] END bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12;, score=0.367 total
time=
       0.2s
[CV 3/5; 463/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124
[CV 3/5; 462/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12;, score=0.400 total
time= 0.2s
[CV 4/5; 463/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124
[CV 5/5; 462/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12;, score=0.366 total
      0.2s
time=
[CV 5/5; 463/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124
[CV 1/5; 463/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=8, n estimators=124;, score=0.412 total
time=
      1.6s
[CV 1/5; 464/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74
[CV 5/5; 463/1000] END bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124;, score=0.394 total
time=
       1.6s
[CV 2/5; 464/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74
[CV 2/5; 463/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124;, score=0.395 total
time=
      1.9s
[CV 3/5; 464/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74
[CV 3/5; 463/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=8, n estimators=124;, score=0.382 total
time= 1.9s
[CV 4/5; 464/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74
[CV 4/5; 463/1000] END bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=124;, score=0.391 total
time=
      1.9s
[CV 5/5; 464/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74
[CV 1/5; 464/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=74;, score=0.404 total
[CV 1/5; 465/1000] START bootstrap=True, max_depth=12, max_features=None,
```

min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=152

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[CV 4/5; 459/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.343 total
time=
       3.6s
[CV 2/5; 465/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=152
[CV 2/5; 464/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=74;, score=0.387 total
time=
      0.8s
[CV 3/5; 465/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152
[CV 3/5; 464/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=74;, score=0.397 total
time=
      0.8s
[CV 1/5; 459/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.396 total
time= 4.0s
[CV 4/5; 465/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152
[CV 5/5; 465/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=152
[CV 4/5; 464/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=74;, score=0.367 total
time= 0.7s
[CV 1/5; 466/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126
[CV 5/5; 464/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=3, n estimators=74;, score=0.394 total
time=
       0.8s
[CV 2/5; 466/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126
[CV 3/5; 459/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.343 total
time=
      4.0s
[CV 3/5; 466/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=126
[CV 5/5; 459/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=4, n estimators=164;, score=0.388 total
time=
      4.0s
[CV 4/5; 466/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126
[CV 2/5; 459/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=164;, score=0.373 total
[CV 5/5; 466/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126
[CV 4/5; 466/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126;, score=0.382 total
```

time=

0.9s

```
[CV 1/5; 467/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2
[CV 3/5; 466/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126;, score=0.376 total
time= 0.9s
[CV 2/5; 467/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=2
[CV 1/5; 467/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=2;, score=0.371 total
time=
      0.0s
[CV 3/5; 467/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2
[CV 2/5; 467/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2;, score=0.369 total
[CV 4/5; 467/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2
[CV 3/5; 467/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2;, score=0.369 total
time=
      0.0s
[CV 5/5; 467/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=2
[CV 4/5; 467/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2;, score=0.353 total
time= 0.0s
[CV 1/5; 468/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=96
[CV 5/5; 467/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=2;, score=0.379 total
time=
      0.0s
[CV 2/5; 468/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=96
[CV 2/5; 466/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126;, score=0.413 total
time=
      1.1s
[CV 3/5; 468/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=96
[CV 1/5; 466/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126;, score=0.406 total
time=
      1.2s
[CV 4/5; 468/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=96
[CV 5/5; 466/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=126;, score=0.385 total
time=
       1.1s
[CV 5/5; 468/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=96
[CV 1/5; 468/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
```

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min samples leaf=1, min samples split=2, n estimators=96;, score=0.418 total
time=
      0.5s
[CV 1/5; 469/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130
[CV 2/5; 468/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=96;, score=0.407 total
time= 0.5s
[CV 2/5; 469/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=130
[CV 1/5; 465/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152;, score=0.399 total
       2.0s
time=
[CV 3/5; 469/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130
[CV 4/5; 468/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=96;, score=0.400 total
time=
      0.6s
[CV 4/5; 469/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130
[CV 3/5; 468/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=96;, score=0.395 total
time= 0.6s
[CV 5/5; 469/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130
[CV 2/5; 465/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152;, score=0.397 total
time=
      2.1s
[CV 1/5; 470/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20
[CV 5/5; 468/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=96;, score=0.394 total
      0.6s
[CV 2/5; 470/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20
[CV 3/5; 465/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152;, score=0.385 total
time=
       2.1s
[CV 3/5; 470/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20
[CV 1/5; 470/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20;, score=0.387 total
      0.2s
time=
[CV 4/5; 470/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20
[CV 2/5; 470/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=20;, score=0.403 total
time=
       0.2s
```

[CV 5/5; 470/1000] START bootstrap=True, max\_depth=20, max\_features=sqrt,

```
min_samples_leaf=3, min_samples_split=3, n_estimators=20
[CV 3/5; 470/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=20;, score=0.394 total
time= 0.2s
[CV 1/5; 471/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=1, min samples split=7, n estimators=150
[CV 4/5; 470/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=20;, score=0.389 total
time=
      0.2s
[CV 2/5; 471/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150
[CV 5/5; 465/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152;, score=0.388 total
time=
        2.2s
[CV 3/5; 471/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150
[CV 5/5; 470/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=20;, score=0.359 total
time=
      0.2s
[CV 4/5; 471/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=1, min samples split=7, n estimators=150
[CV 4/5; 465/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=152;, score=0.404 total
time=
       2.2s
[CV 5/5; 471/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150
[CV 2/5; 469/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130;, score=0.408 total
[CV 1/5; 472/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 1/5; 469/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130;, score=0.408 total
time=
      1.8s
[CV 2/5; 472/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=174
[CV 3/5; 469/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130;, score=0.343 total
time= 1.8s
[CV 3/5; 472/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 5/5; 469/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130;, score=0.373 total
time=
      1.9s
[CV 4/5; 472/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 4/5; 469/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=130;, score=0.375 total
```

```
time=
        1.9s
[CV 5/5; 472/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 2/5; 471/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=1, min samples split=7, n estimators=150;, score=0.408 total
time=
        1.6s
[CV 1/5; 473/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42
[CV 5/5; 471/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150;, score=0.389 total
time= 1.6s
[CV 2/5; 473/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42
[CV 1/5; 471/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150;, score=0.411 total
time=
      1.9s
[CV 3/5; 473/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42
[CV 4/5; 471/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=1, min samples split=7, n estimators=150;, score=0.406 total
time=
      1.8s
[CV 4/5; 473/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42
[CV 3/5; 471/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=150;, score=0.400 total
time=
       1.9s
[CV 5/5; 473/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42
[CV 1/5; 473/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42;, score=0.396 total
time=
      0.5s
[CV 1/5; 474/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144
[CV 2/5; 473/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=4, n estimators=42;, score=0.388 total
time= 0.6s
[CV 2/5; 474/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144
[CV 3/5; 473/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42;, score=0.388 total
time=
      0.7s
[CV 3/5; 474/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144
[CV 4/5; 473/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42;, score=0.384 total
[CV 4/5; 474/1000] START bootstrap=True, max_depth=17, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=144

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[CV 5/5; 473/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=42;, score=0.360 total
time=
      0.6s
[CV 5/5; 474/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=1, min samples split=8, n estimators=144
[CV 3/5; 472/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=174;, score=0.370 total
time=
      1.8s
[CV 1/5; 475/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64
[CV 2/5; 472/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.367 total
time=
      1.9s
[CV 2/5; 475/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64
[CV 1/5; 472/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.418 total
time= 1.9s
[CV 3/5; 475/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=2, min samples split=6, n estimators=64
[CV 4/5; 472/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=174;, score=0.384 total
time= 1.9s
[CV 4/5; 475/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64
[CV 5/5; 472/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.370 total
time=
      1.9s
[CV 5/5; 475/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64
[CV 1/5; 475/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64;, score=0.412 total
time=
      0.9s
[CV 1/5; 476/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=40
[CV 2/5; 475/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=2, min samples split=6, n estimators=64;, score=0.394 total
time=
      0.9s
[CV 2/5; 476/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40
[CV 3/5; 475/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=2, min samples split=6, n estimators=64;, score=0.382 total
      0.9s
[CV 3/5; 476/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40
[CV 4/5; 475/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64;, score=0.398 total
```

0.8s

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[CV 4/5; 476/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40
[CV 1/5; 474/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.401 total
time=
      2.2s
[CV 5/5; 476/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=40
[CV 1/5; 476/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=40;, score=0.396 total
time=
      0.3s
[CV 1/5; 477/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116
[CV 2/5; 474/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.413 total
[CV 2/5; 477/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116
[CV 5/5; 475/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=64;, score=0.375 total
time=
      0.9s
[CV 3/5; 477/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=116
[CV 2/5; 476/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40;, score=0.388 total
time= 0.4s
[CV 4/5; 477/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116
[CV 3/5; 476/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=40;, score=0.387 total
time=
      0.4s
[CV 5/5; 477/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116
[CV 4/5; 476/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40;, score=0.372 total
time=
      0.4s
[CV 1/5; 478/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=108
[CV 5/5; 476/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=40;, score=0.360 total
time=
      0.4s
[CV 2/5; 478/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108
[CV 4/5; 474/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.379 total
time=
        2.3s
[CV 3/5; 478/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108
[CV 3/5; 474/1000] END bootstrap=True, max depth=17, max features=None,
```

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min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.375 total
time=
       2.4s
[CV 4/5; 478/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108
[CV 5/5; 474/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=144;, score=0.379 total
time=
       2.4s
[CV 5/5; 478/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=108
[CV 2/5; 477/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116;, score=0.419 total
time=
       0.8s
[CV 1/5; 479/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30
[CV 1/5; 478/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108;, score=0.418 total
time=
       0.6s
[CV 2/5; 479/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=30
[CV 2/5; 478/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=108;, score=0.404 total
time= 0.6s
[CV 3/5; 479/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30
[CV 3/5; 477/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116;, score=0.367 total
time=
      0.9s
[CV 4/5; 479/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=30
[CV 1/5; 477/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116;, score=0.406 total
      1.0s
[CV 5/5; 479/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=30
[CV 4/5; 477/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116;, score=0.404 total
time= 0.9s
[CV 1/5; 480/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 3/5; 478/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108;, score=0.373 total
      0.6s
time=
[CV 2/5; 480/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 5/5; 477/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=116;, score=0.382 total
time=
       0.9s
[CV 3/5; 480/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
```

```
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 4/5; 478/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108;, score=0.401 total
time= 0.6s
[CV 4/5; 480/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60
[CV 5/5; 478/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=108;, score=0.406 total
time=
      0.6s
[CV 5/5; 480/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60
[CV 1/5; 479/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30;, score=0.396 total
time=
       0.5s
[CV 1/5; 481/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86
[CV 2/5; 479/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30;, score=0.379 total
time=
      0.4s
[CV 2/5; 481/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=86
[CV 4/5; 479/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=30;, score=0.360 total
time=
      0.4s
[CV 3/5; 481/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86
[CV 1/5; 480/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.424 total
[CV 4/5; 481/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86
[CV 3/5; 479/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30;, score=0.367 total
time=
      0.5s
[CV 5/5; 481/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=86
[CV 2/5; 480/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.423 total
time= 0.4s
[CV 1/5; 482/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178
[CV 3/5; 480/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.395 total
time=
      0.4s
[CV 2/5; 482/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178
[CV 5/5; 479/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=30;, score=0.381 total
```

```
0.5s
time=
[CV 3/5; 482/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178
[CV 4/5; 480/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=60;, score=0.392 total
       0.4s
time=
[CV 5/5; 480/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=60;, score=0.394 total
      0.4s
[CV 4/5; 482/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178
[CV 5/5; 482/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178
[CV 2/5; 481/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86;, score=0.411 total
time=
      0.8s
[CV 1/5; 481/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=86;, score=0.405 total
time=
      0.8s
[CV 1/5; 483/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=178
[CV 2/5; 483/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178
[CV 3/5; 481/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86;, score=0.381 total
time=
       0.8s
[CV 3/5; 483/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178
[CV 4/5; 481/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=86;, score=0.407 total
time=
      0.8s
[CV 4/5; 483/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178
[CV 5/5; 481/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=86;, score=0.392 total
time= 0.8s
[CV 5/5; 483/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178
[CV 3/5; 482/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178;, score=0.395 total
time=
      1.8s
[CV 1/5; 484/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196
[CV 1/5; 482/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178;, score=0.396 total
[CV 2/5; 484/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196
```

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[CV 2/5; 483/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178;, score=0.410 total
time=
      1.4s
[CV 3/5; 484/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=196
[CV 5/5; 483/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=178;, score=0.400 total
time=
      1.3s
[CV 4/5; 484/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196
[CV 2/5; 482/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178;, score=0.416 total
time=
       2.0s
[CV 5/5; 484/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196
[CV 1/5; 483/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178;, score=0.389 total
      1.5s
[CV 1/5; 485/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=6, n estimators=108
[CV 5/5; 482/1000] END bootstrap=True, max depth=9, max features=None,
min samples leaf=1, min samples split=3, n estimators=178;, score=0.385 total
time=
      2.0s
[CV 2/5; 485/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108
[CV 3/5; 483/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=178;, score=0.365 total
time=
       1.4s
[CV 3/5; 485/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108
[CV 4/5; 482/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=178;, score=0.391 total
time=
      2.0s
[CV 4/5; 485/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=6, n estimators=108
[CV 4/5; 483/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=178;, score=0.403 total
time=
      1.4s
[CV 5/5; 485/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108
[CV 4/5; 485/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108;, score=0.407 total
      1.0s
[CV 1/5; 486/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 2/5; 485/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108;, score=0.404 total
time=
      1.1s
```

```
[CV 2/5; 486/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 1/5; 485/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108;, score=0.428 total
time= 1.2s
[CV 3/5; 486/1000] START bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=4, n estimators=136
[CV 3/5; 485/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=6, n estimators=108;, score=0.407 total
time=
      1.2s
[CV 4/5; 486/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 5/5; 485/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=108;, score=0.400 total
[CV 5/5; 486/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 1/5; 486/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.415 total
time=
      0.9s
[CV 1/5; 487/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=1, min samples split=6, n estimators=146
[CV 2/5; 486/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.408 total
time= 1.1s
[CV 2/5; 487/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146
[CV 3/5; 486/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.398 total
time=
      1.1s
[CV 3/5; 487/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146
[CV 4/5; 486/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.381 total
time=
      1.1s
[CV 4/5; 487/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=1, min samples split=6, n estimators=146
[CV 5/5; 486/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.387 total
time=
      1.2s
[CV 5/5; 487/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146
[CV 1/5; 484/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196;, score=0.399 total
time=
        2.7s
[CV 1/5; 488/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198
[CV 4/5; 484/1000] END bootstrap=True, max depth=16, max features=None,
```

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min_samples_leaf=3, min_samples_split=5, n_estimators=196;, score=0.379 total
time=
      3.0s
[CV 2/5; 488/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198
[CV 2/5; 484/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196;, score=0.400 total
time= 3.0s
[CV 3/5; 488/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=198
[CV 5/5; 484/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196;, score=0.373 total
time=
       3.1s
[CV 4/5; 488/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198
[CV 3/5; 484/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=196;, score=0.365 total
time=
        3.2s
[CV 5/5; 488/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198
[CV 1/5; 488/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198;, score=0.404 total
time=
       2.4s
[CV 1/5; 489/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124
[CV 1/5; 487/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146;, score=0.385 total
time=
      3.0s
[CV 2/5; 489/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124
[CV 5/5; 487/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146;, score=0.367 total
[CV 3/5; 489/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124
[CV 2/5; 487/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146;, score=0.357 total
time= 3.3s
[CV 4/5; 489/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124
[CV 4/5; 487/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146;, score=0.367 total
       3.3s
time=
[CV 5/5; 489/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124
[CV 3/5; 487/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=146;, score=0.348 total
time=
       3.4s
[CV 1/5; 490/1000] START bootstrap=True, max depth=15, max features=None,
```

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min_samples_leaf=3, min_samples_split=7, n_estimators=84
[CV 2/5; 488/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198;, score=0.408 total
time=
       2.8s
[CV 2/5; 490/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=84
[CV 3/5; 488/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198;, score=0.391 total
time=
       2.8s
[CV 3/5; 490/1000] START bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=84
[CV 4/5; 488/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198;, score=0.413 total
time=
        2.8s
[CV 5/5; 488/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=198;, score=0.381 total
time=
       2.7s
[CV 4/5; 490/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=84
[CV 5/5; 490/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=84
[CV 1/5; 489/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124;, score=0.408 total
time=
      1.7s
[CV 1/5; 491/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80
[CV 5/5; 490/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=84;, score=0.387 total
[CV 2/5; 491/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80
[CV 2/5; 489/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124;, score=0.401 total
time=
       2.0s
[CV 3/5; 491/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=80
[CV 2/5; 490/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=84;, score=0.392 total
time= 1.3s
[CV 4/5; 491/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80
[CV 1/5; 490/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=84;, score=0.406 total
time=
       1.3s
[CV 5/5; 491/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80
[CV 4/5; 490/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=7, n estimators=84;, score=0.387 total
```

```
time=
        1.3s
[CV 1/5; 492/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 3/5; 490/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=7, n estimators=84;, score=0.388 total
        1.3s
time=
[CV 2/5; 492/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 1/5; 492/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.405 total
time= 0.1s
[CV 3/5; 492/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 2/5; 492/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.387 total
time=
      0.1s
[CV 4/5; 492/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 3/5; 492/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=8, n estimators=8;, score=0.397 total
time=
      0.1s
[CV 5/5; 492/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8
[CV 4/5; 492/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.367 total
time=
      0.1s
[CV 1/5; 493/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78
[CV 5/5; 492/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=8;, score=0.394 total
time=
      0.1s
[CV 2/5; 493/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78
[CV 3/5; 489/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=9, n estimators=124;, score=0.379 total
time=
       2.0s
[CV 3/5; 493/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78
[CV 5/5; 489/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124;, score=0.379 total
time=
       2.0s
[CV 4/5; 493/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78
[CV 4/5; 489/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=124;, score=0.391 total
[CV 5/5; 493/1000] START bootstrap=True, max_depth=18, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=78

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[CV 1/5; 491/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80;, score=0.405 total
time=
      1.1s
[CV 1/5; 494/1000] START bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=154
[CV 2/5; 491/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=80;, score=0.379 total
time= 0.9s
[CV 2/5; 494/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154
[CV 4/5; 491/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=80;, score=0.372 total
time=
      1.0s
[CV 3/5; 494/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154
[CV 5/5; 491/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=80;, score=0.366 total
time= 1.1s
[CV 4/5; 494/1000] START bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=154
[CV 3/5; 491/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=80;, score=0.338 total
time=
      1.1s
[CV 5/5; 494/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154
[CV 2/5; 493/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=1, min samples split=9, n estimators=78;, score=0.419 total
time=
       1.2s
[CV 1/5; 495/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172
[CV 1/5; 493/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78;, score=0.406 total
time= 1.3s
[CV 2/5; 495/1000] START bootstrap=True, max_depth=17, max_features=None,
min samples leaf=2, min samples split=2, n estimators=172
[CV 3/5; 493/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=1, min samples split=9, n estimators=78;, score=0.382 total
time=
      1.4s
[CV 3/5; 495/1000] START bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172
[CV 4/5; 493/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=1, min samples split=9, n estimators=78;, score=0.378 total
[CV 4/5; 495/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172
[CV 5/5; 493/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=78;, score=0.379 total
```

1.4s

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[CV 5/5; 495/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172
[CV 2/5; 494/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154;, score=0.372 total
time= 2.9s
[CV 1/5; 496/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=142
[CV 1/5; 494/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=3, min samples split=9, n estimators=154;, score=0.390 total
time=
      3.1s
[CV 2/5; 496/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142
[CV 4/5; 494/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154;, score=0.367 total
[CV 3/5; 496/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142
[CV 1/5; 495/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172;, score=0.396 total
time=
      2.5s
[CV 4/5; 496/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=142
[CV 3/5; 494/1000] END bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154;, score=0.351 total
time= 3.1s
[CV 5/5; 496/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142
[CV 5/5; 494/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=154;, score=0.388 total
time=
       3.1s
[CV 1/5; 497/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24
[CV 3/5; 495/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172;, score=0.366 total
time=
      2.5s
[CV 2/5; 497/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=24
[CV 1/5; 497/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24;, score=0.398 total
time=
      0.2s
[CV 3/5; 497/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24
[CV 2/5; 495/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172;, score=0.408 total
time=
        2.8s
[CV 4/5; 497/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24
[CV 2/5; 497/1000] END bootstrap=True, max depth=10, max features=sqrt,
```

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min samples leaf=1, min samples split=3, n estimators=24;, score=0.411 total
time=
      0.2s
[CV 5/5; 497/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24
[CV 1/5; 496/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142;, score=0.409 total
time= 0.8s
[CV 1/5; 498/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=174
[CV 2/5; 496/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142;, score=0.401 total
       0.8s
time=
[CV 2/5; 498/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174
[CV 3/5; 497/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=24;, score=0.379 total
time=
       0.2s
[CV 3/5; 498/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174
[CV 5/5; 495/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172;, score=0.379 total
       2.7s
time=
[CV 4/5; 498/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174
[CV 5/5; 497/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=24;, score=0.382 total
time=
      0.2s
[CV 5/5; 498/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174
[CV 4/5; 495/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=172;, score=0.354 total
       2.8s
[CV 1/5; 499/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120
[CV 4/5; 497/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=24;, score=0.379 total
time= 0.2s
[CV 2/5; 499/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120
[CV 3/5; 496/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142;, score=0.354 total
      0.8s
time=
[CV 3/5; 499/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120
[CV 4/5; 496/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142;, score=0.363 total
time=
      0.8s
```

[CV 4/5; 499/1000] START bootstrap=True, max depth=12, max features=None,

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min_samples_leaf=1, min_samples_split=3, n_estimators=120
[CV 5/5; 496/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=142;, score=0.410 total
time= 0.8s
[CV 5/5; 499/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=3, n estimators=120
[CV 1/5; 498/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=174;, score=0.399 total
time=
      1.7s
[CV 1/5; 500/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28
[CV 2/5; 499/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120;, score=0.416 total
time=
      1.7s
[CV 2/5; 500/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28
[CV 1/5; 499/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120;, score=0.401 total
time=
      1.7s
[CV 3/5; 500/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=7, n estimators=28
[CV 5/5; 498/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174;, score=0.382 total
time=
      1.7s
[CV 4/5; 500/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28
[CV 2/5; 498/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174;, score=0.376 total
[CV 5/5; 500/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28
[CV 3/5; 499/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120;, score=0.404 total
time=
      1.7s
[CV 4/5; 499/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120;, score=0.403 total
time= 1.6s
[CV 1/5; 501/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180
[CV 2/5; 501/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180
[CV 3/5; 498/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174;, score=0.372 total
time=
       2.0s
[CV 3/5; 501/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180
[CV 5/5; 499/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=120;, score=0.397 total
```

```
time=
        1.6s
[CV 4/5; 501/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180
[CV 1/5; 500/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=7, n estimators=28;, score=0.371 total
time=
       0.5s
[CV 5/5; 501/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180
[CV 4/5; 498/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=174;, score=0.389 total
time=
       2.1s
[CV 1/5; 502/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190
[CV 2/5; 500/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28;, score=0.373 total
time=
      0.4s
[CV 2/5; 502/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190
[CV 3/5; 500/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=7, n estimators=28;, score=0.351 total
time=
      0.4s
[CV 3/5; 502/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190
[CV 4/5; 500/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28;, score=0.356 total
time=
       0.5s
[CV 4/5; 502/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190
[CV 5/5; 500/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=28;, score=0.367 total
time=
      0.4s
[CV 5/5; 502/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190
[CV 4/5; 502/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=190;, score=0.381 total
time=
      1.2s
[CV 1/5; 503/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190
[CV 1/5; 502/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.411 total
time=
      1.5s
[CV 2/5; 503/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190
[CV 3/5; 502/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.363 total
[CV 3/5; 503/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190
```

```
[CV 2/5; 502/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=190;, score=0.397 total
time=
      1.4s
[CV 4/5; 503/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=190
[CV 5/5; 502/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=190;, score=0.406 total
time=
      1.4s
[CV 5/5; 503/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190
[CV 1/5; 503/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190;, score=0.418 total
time=
      0.9s
[CV 1/5; 504/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126
[CV 3/5; 503/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190;, score=0.378 total
time= 1.0s
[CV 2/5; 504/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=126
[CV 2/5; 503/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=190;, score=0.400 total
time=
      1.0s
[CV 3/5; 504/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126
[CV 4/5; 503/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190;, score=0.403 total
time=
      1.0s
[CV 4/5; 504/1000] START bootstrap=False, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126
[CV 5/5; 503/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=190;, score=0.398 total
time=
      1.0s
[CV 5/5; 504/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=126
[CV 1/5; 504/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=126;, score=0.406 total
time=
      1.2s
[CV 1/5; 505/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 2/5; 504/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126;, score=0.392 total
[CV 2/5; 505/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 3/5; 504/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126;, score=0.376 total
time=
      1.4s
```

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[CV 3/5; 505/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 4/5; 504/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=126;, score=0.384 total
time= 1.4s
[CV 4/5; 505/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=156
[CV 5/5; 504/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=126;, score=0.373 total
time=
      1.4s
[CV 5/5; 505/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 5/5; 501/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180;, score=0.365 total
[CV 1/5; 506/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=14
[CV 1/5; 506/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=14;, score=0.409 total
time=
      0.1s
[CV 2/5; 506/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=14
[CV 2/5; 506/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=14;, score=0.401 total
time= 0.1s
[CV 3/5; 506/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=14
[CV 3/5; 506/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=14;, score=0.369 total
time=
      0.1s
[CV 4/5; 506/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=14
[CV 4/5; 501/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180;, score=0.341 total
time=
      4.7s
[CV 5/5; 506/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=14
[CV 4/5; 506/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=14;, score=0.384 total
      0.1s
[CV 1/5; 505/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.392 total
[CV 1/5; 507/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 2/5; 507/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 5/5; 506/1000] END bootstrap=False, max depth=5, max features=sqrt,
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min samples leaf=1, min samples split=2, n estimators=14;, score=0.423 total
time=
      0.1s
[CV 3/5; 507/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 3/5; 501/1000] END bootstrap=False, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180;, score=0.328 total
time= 4.9s
[CV 4/5; 507/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=102
[CV 1/5; 501/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180;, score=0.385 total
       5.0s
time=
[CV 5/5; 507/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=102
[CV 2/5; 501/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=180;, score=0.357 total
time=
       5.2s
[CV 1/5; 508/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40
[CV 2/5; 505/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=156;, score=0.398 total
time= 1.3s
[CV 2/5; 508/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40
[CV 3/5; 505/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.382 total
time=
      1.3s
[CV 3/5; 508/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40
[CV 4/5; 505/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.392 total
      1.3s
[CV 4/5; 508/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40
[CV 2/5; 507/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.404 total
time= 0.6s
[CV 5/5; 508/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40
[CV 1/5; 507/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.420 total
      0.6s
time=
[CV 1/5; 509/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192
[CV 3/5; 507/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.408 total
time=
      0.6s
```

[CV 2/5; 509/1000] START bootstrap=True, max depth=11, max features=sqrt,

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min_samples_leaf=1, min_samples_split=2, n_estimators=192
[CV 5/5; 505/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.384 total
      1.2s
[CV 3/5; 509/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=192
[CV 4/5; 507/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.413 total
time=
      0.6s
[CV 4/5; 509/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192
[CV 5/5; 507/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.414 total
time=
       0.6s
[CV 5/5; 509/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192
[CV 1/5; 508/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=40;, score=0.408 total
time=
      0.5s
[CV 1/5; 510/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=3, min samples split=3, n estimators=44
[CV 3/5; 508/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40;, score=0.360 total
time=
      0.5s
[CV 2/5; 510/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44
[CV 2/5; 508/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=40;, score=0.370 total
[CV 3/5; 510/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44
[CV 4/5; 508/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=40;, score=0.375 total
time=
      0.5s
[CV 4/5; 510/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=3, min samples split=3, n estimators=44
[CV 5/5; 508/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=40;, score=0.369 total
time= 0.5s
[CV 5/5; 510/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44
[CV 4/5; 509/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192;, score=0.403 total
time=
      1.2s
[CV 1/5; 511/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60
[CV 1/5; 509/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192;, score=0.392 total
```

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time=
        1.4s
[CV 2/5; 511/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60
[CV 2/5; 509/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=192;, score=0.411 total
time=
        1.4s
[CV 3/5; 511/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60
[CV 3/5; 509/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192;, score=0.398 total
time= 1.4s
[CV 4/5; 511/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60
[CV 5/5; 509/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=192;, score=0.375 total
time=
      1.4s
[CV 5/5; 511/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60
[CV 2/5; 510/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=3, n estimators=44;, score=0.348 total
time=
      1.2s
[CV 1/5; 512/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102
[CV 4/5; 510/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44;, score=0.348 total
time=
       1.3s
[CV 2/5; 512/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102
[CV 3/5; 510/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44;, score=0.353 total
time=
      1.4s
[CV 3/5; 512/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102
[CV 1/5; 511/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=2, n estimators=60;, score=0.425 total
time= 0.5s
[CV 4/5; 512/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102
[CV 1/5; 510/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44;, score=0.336 total
time=
      1.4s
[CV 5/5; 512/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102
[CV 5/5; 510/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=44;, score=0.347 total
[CV 1/5; 513/1000] START bootstrap=True, max_depth=None, max_features=None,
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min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=80

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[CV 2/5; 511/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60;, score=0.419 total
time=
      0.5s
[CV 2/5; 513/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=80
[CV 3/5; 511/1000] END bootstrap=True, max depth=6, max features=None,
min samples leaf=1, min samples split=2, n estimators=60;, score=0.394 total
time= 0.5s
[CV 3/5; 513/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=80
[CV 4/5; 511/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=2, n estimators=60;, score=0.385 total
time=
      0.5s
[CV 4/5; 513/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=80
[CV 5/5; 511/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=60;, score=0.407 total
time= 0.5s
[CV 5/5; 513/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=80
[CV 1/5; 512/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=102;, score=0.409 total
time= 0.6s
[CV 1/5; 514/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128
[CV 4/5; 512/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102;, score=0.376 total
time=
      0.5s
[CV 2/5; 514/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128
[CV 2/5; 512/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102;, score=0.395 total
time=
      0.6s
[CV 3/5; 514/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=128
[CV 3/5; 512/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=102;, score=0.348 total
time=
      0.6s
[CV 4/5; 514/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128
[CV 5/5; 512/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=102;, score=0.408 total
      0.6s
[CV 5/5; 514/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128
[CV 1/5; 513/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=80;, score=0.382 total
```

1.4s

```
[CV 1/5; 515/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=44
[CV 2/5; 513/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=80;, score=0.395 total
time= 1.4s
[CV 2/5; 515/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=6, n estimators=44
[CV 5/5; 513/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=80;, score=0.387 total
time=
      1.3s
[CV 3/5; 515/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=44
[CV 4/5; 513/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=80;, score=0.362 total
[CV 4/5; 515/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=44
[CV 3/5; 513/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=80;, score=0.387 total
time=
      1.5s
[CV 5/5; 515/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=6, n estimators=44
[CV 2/5; 514/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128;, score=0.389 total
time= 1.1s
[CV 1/5; 516/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 1/5; 514/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128;, score=0.385 total
time=
      1.3s
[CV 2/5; 516/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 5/5; 514/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128;, score=0.376 total
time=
      1.2s
[CV 3/5; 516/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=138
[CV 3/5; 514/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128;, score=0.401 total
      1.3s
time=
[CV 4/5; 516/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 4/5; 514/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=128;, score=0.373 total
time=
       1.3s
[CV 5/5; 516/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138
[CV 3/5; 515/1000] END bootstrap=False, max_depth=12, max_features=None,
```

```
min samples leaf=1, min samples split=6, n estimators=44;, score=0.357 total
time=
      0.8s
[CV 1/5; 517/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102
[CV 2/5; 515/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=44;, score=0.370 total
time= 1.0s
[CV 2/5; 517/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=2, min samples split=9, n estimators=102
[CV 1/5; 515/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=6, n estimators=44;, score=0.379 total
       1.0s
time=
[CV 3/5; 517/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102
[CV 4/5; 515/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=6, n estimators=44;, score=0.375 total
time=
      0.9s
[CV 4/5; 517/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102
[CV 5/5; 515/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=44;, score=0.367 total
time= 1.0s
[CV 5/5; 517/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102
[CV 1/5; 516/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.398 total
time=
      1.3s
[CV 1/5; 518/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146
[CV 2/5; 516/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.382 total
      1.6s
[CV 2/5; 518/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146
[CV 3/5; 516/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.375 total
time= 1.6s
[CV 3/5; 518/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146
[CV 4/5; 516/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.379 total
      1.6s
time=
[CV 4/5; 518/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146
[CV 5/5; 516/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=138;, score=0.391 total
time=
      1.6s
[CV 5/5; 518/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
```

```
min_samples_leaf=2, min_samples_split=9, n_estimators=146
[CV 1/5; 517/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102;, score=0.411 total
      1.2s
[CV 1/5; 519/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=2, n estimators=138
[CV 2/5; 517/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102;, score=0.395 total
time=
      1.5s
[CV 2/5; 519/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 4/5; 517/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102;, score=0.397 total
time=
      1.5s
[CV 3/5; 519/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 5/5; 517/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102;, score=0.385 total
time=
      1.5s
[CV 4/5; 519/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=2, n estimators=138
[CV 3/5; 517/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=102;, score=0.392 total
time=
      1.6s
[CV 5/5; 519/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 1/5; 518/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146;, score=0.396 total
[CV 1/5; 520/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 3/5; 518/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146;, score=0.354 total
time=
       2.0s
[CV 2/5; 520/1000] START bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=4, n estimators=86
[CV 2/5; 518/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146;, score=0.378 total
time=
       2.2s
[CV 3/5; 520/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 1/5; 519/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.387 total
time=
      1.9s
[CV 4/5; 520/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 5/5; 518/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=146;, score=0.369 total
```

```
time=
        2.2s
[CV 5/5; 520/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 4/5; 518/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=146;, score=0.375 total
time=
        2.2s
[CV 1/5; 521/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 1/5; 520/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86;, score=0.418 total
time= 0.7s
[CV 2/5; 521/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 2/5; 520/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86;, score=0.417 total
time=
      0.7s
[CV 3/5; 521/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 2/5; 519/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=3, min samples split=2, n estimators=138;, score=0.407 total
time=
      2.1s
[CV 4/5; 521/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 4/5; 520/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86;, score=0.381 total
time=
       0.6s
[CV 5/5; 521/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138
[CV 3/5; 520/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=86;, score=0.389 total
time=
      0.7s
[CV 1/5; 522/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138
[CV 5/5; 520/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=3, min samples split=4, n estimators=86;, score=0.398 total
time= 0.7s
[CV 2/5; 522/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138
[CV 4/5; 519/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.369 total
time=
      2.2s
[CV 3/5; 522/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138
[CV 3/5; 519/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.378 total
[CV 4/5; 522/1000] START bootstrap=False, max_depth=11, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=138

```
[CV 5/5; 519/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.375 total
time=
       2.4s
[CV 5/5; 522/1000] START bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=8, n estimators=138
[CV 1/5; 521/1000] END bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=138;, score=0.399 total
time=
       2.1s
[CV 1/5; 523/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146
[CV 4/5; 521/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.382 total
time=
      1.7s
[CV 2/5; 523/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146
[CV 2/5; 521/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.389 total
       2.1s
[CV 3/5; 523/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=146
[CV 3/5; 521/1000] END bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=138;, score=0.357 total
time=
      2.1s
[CV 4/5; 523/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146
[CV 5/5; 521/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=138;, score=0.379 total
time=
       2.0s
[CV 5/5; 523/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146
[CV 1/5; 522/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138;, score=0.383 total
time=
      2.5s
[CV 1/5; 524/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=6
[CV 1/5; 524/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=6;, score=0.395 total
time=
      0.1s
[CV 2/5; 524/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6
[CV 2/5; 524/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6;, score=0.403 total
      0.1s
[CV 3/5; 524/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6
[CV 3/5; 524/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6;, score=0.344 total
time=
       0.1s
```

```
[CV 4/5; 524/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6
[CV 4/5; 524/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=6;, score=0.384 total
time= 0.1s
[CV 5/5; 524/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=6
[CV 5/5; 524/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=6;, score=0.375 total
time=
      0.1s
[CV 1/5; 525/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166
[CV 4/5; 522/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138;, score=0.366 total
[CV 2/5; 525/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166
[CV 2/5; 522/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138;, score=0.373 total
time=
       2.8s
[CV 3/5; 525/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=7, n estimators=166
[CV 3/5; 522/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=1, min samples split=8, n estimators=138;, score=0.353 total
time=
       2.8s
[CV 4/5; 525/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166
[CV 5/5; 522/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=138;, score=0.379 total
time=
       2.8s
[CV 5/5; 525/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166
[CV 1/5; 523/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146;, score=0.401 total
time=
      2.4s
[CV 1/5; 526/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=1, min samples split=5, n estimators=38
[CV 2/5; 523/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146;, score=0.404 total
time=
       2.6s
[CV 2/5; 526/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 3/5; 523/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146;, score=0.378 total
time=
        2.4s
[CV 3/5; 526/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 4/5; 523/1000] END bootstrap=True, max depth=16, max features=None,
```

```
min_samples_leaf=1, min_samples_split=2, n_estimators=146;, score=0.363 total
time=
       2.3s
[CV 4/5; 526/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38
[CV 5/5; 523/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=146;, score=0.381 total
time= 2.4s
[CV 5/5; 526/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=38
[CV 1/5; 526/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.383 total
time=
       0.8s
[CV 1/5; 527/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 1/5; 527/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=18;, score=0.411 total
time=
      0.2s
[CV 2/5; 527/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 2/5; 526/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38;, score=0.370 total
time= 0.9s
[CV 3/5; 527/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 3/5; 526/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.357 total
time=
      0.9s
[CV 4/5; 527/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 2/5; 527/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=18;, score=0.410 total
      0.2s
[CV 5/5; 527/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 4/5; 526/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=38;, score=0.373 total
time= 0.8s
[CV 1/5; 528/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 3/5; 527/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.384 total
      0.1s
time=
[CV 2/5; 528/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 5/5; 526/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=1, min samples split=5, n estimators=38;, score=0.367 total
time=
       0.8s
```

[CV 3/5; 528/1000] START bootstrap=False, max\_depth=13, max\_features=None,

```
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 4/5; 527/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=18;, score=0.388 total
time= 0.2s
[CV 4/5; 528/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=9, n estimators=134
[CV 5/5; 527/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.362 total
time=
      0.2s
[CV 5/5; 528/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134
[CV 1/5; 525/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166;, score=0.373 total
time=
        2.7s
[CV 1/5; 529/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=22
[CV 2/5; 525/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166;, score=0.367 total
time=
      2.6s
[CV 2/5; 529/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=22
[CV 4/5; 525/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166;, score=0.354 total
time=
       2.5s
[CV 3/5; 529/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=22
[CV 3/5; 525/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=166;, score=0.354 total
[CV 4/5; 529/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=22
[CV 1/5; 529/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=22;, score=0.386 total
time=
      0.2s
[CV 5/5; 529/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=22
[CV 2/5; 529/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=22;, score=0.400 total
time= 0.2s
[CV 1/5; 530/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 3/5; 529/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=22;, score=0.414 total
time=
      0.2s
[CV 2/5; 530/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 4/5; 529/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=22;, score=0.357 total
```

```
time=
        0.2s
[CV 3/5; 530/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 5/5; 525/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=7, n estimators=166;, score=0.366 total
time=
        2.7s
[CV 4/5; 530/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 5/5; 529/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=22;, score=0.391 total
time= 0.3s
[CV 5/5; 530/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 1/5; 530/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94;, score=0.423 total
time=
      0.6s
[CV 1/5; 531/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156
[CV 2/5; 530/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.422 total
time=
      0.6s
[CV 2/5; 531/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156
[CV 3/5; 530/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94;, score=0.394 total
time=
       0.5s
[CV 3/5; 531/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156
[CV 4/5; 530/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94;, score=0.400 total
time=
      0.6s
[CV 4/5; 531/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156
[CV 5/5; 530/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.397 total
time= 0.6s
[CV 5/5; 531/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156
[CV 3/5; 528/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.347 total
time=
       2.9s
[CV 1/5; 532/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=74
[CV 2/5; 528/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.366 total
[CV 2/5; 532/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=74
```

```
[CV 4/5; 528/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.365 total
time=
       2.9s
[CV 3/5; 532/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=74
[CV 5/5; 528/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=9, n estimators=134;, score=0.363 total
time=
       3.0s
[CV 4/5; 532/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=74
[CV 1/5; 528/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=134;, score=0.396 total
time=
       3.2s
[CV 5/5; 532/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=74
[CV 3/5; 531/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156;, score=0.353 total
       2.1s
[CV 1/5; 533/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84
[CV 4/5; 531/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=5, n estimators=156;, score=0.357 total
time=
      2.2s
[CV 2/5; 533/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84
[CV 1/5; 531/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156;, score=0.376 total
time=
       2.4s
[CV 3/5; 533/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84
[CV 1/5; 532/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=74;, score=0.409 total
time=
      0.7s
[CV 4/5; 533/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=1, min samples split=8, n estimators=84
[CV 2/5; 531/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=5, n estimators=156;, score=0.367 total
time=
       2.5s
[CV 5/5; 533/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84
[CV 2/5; 532/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=74;, score=0.385 total
      0.7s
[CV 1/5; 534/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120
[CV 3/5; 532/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=74;, score=0.369 total
```

0.7s

```
[CV 2/5; 534/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120
[CV 5/5; 531/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=156;, score=0.370 total
      2.5s
time=
[CV 3/5; 534/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=3, n estimators=120
[CV 5/5; 532/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=74;, score=0.391 total
time=
      0.7s
[CV 4/5; 534/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120
[CV 4/5; 532/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=74;, score=0.376 total
       0.7s
[CV 5/5; 534/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120
[CV 3/5; 533/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84;, score=0.376 total
time=
      1.2s
[CV 1/5; 535/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=92
[CV 1/5; 533/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.402 total
time= 1.5s
[CV 2/5; 535/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=92
[CV 2/5; 533/1000] END bootstrap=True, max_depth=20, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.410 total
time=
      1.5s
[CV 3/5; 535/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=92
[CV 4/5; 533/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84;, score=0.372 total
time=
      1.5s
[CV 4/5; 535/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=92
[CV 5/5; 533/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84;, score=0.372 total
time=
      1.4s
[CV 1/5; 535/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=92;, score=0.415 total
      0.3s
[CV 5/5; 535/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=92
[CV 1/5; 536/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 2/5; 535/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
```

```
min samples leaf=2, min samples split=6, n estimators=92;, score=0.414 total
time=
      0.4s
[CV 2/5; 536/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 3/5; 535/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=92;, score=0.385 total
time= 0.4s
[CV 3/5; 536/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=2, n estimators=138
[CV 5/5; 535/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=92;, score=0.407 total
       0.4s
time=
[CV 4/5; 536/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 4/5; 535/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=92;, score=0.387 total
time=
      0.4s
[CV 5/5; 536/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138
[CV 2/5; 534/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120;, score=0.387 total
       2.7s
time=
[CV 1/5; 537/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=66
[CV 4/5; 534/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120;, score=0.331 total
time=
      2.7s
[CV 2/5; 537/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=66
[CV 1/5; 536/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.404 total
      1.6s
[CV 3/5; 537/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=66
[CV 1/5; 534/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120;, score=0.380 total
time= 3.1s
[CV 4/5; 537/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=66
[CV 2/5; 536/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=138;, score=0.406 total
time=
      1.6s
[CV 5/5; 537/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=66
[CV 3/5; 534/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=120;, score=0.334 total
time=
       3.0s
```

[CV 1/5; 538/1000] START bootstrap=True, max depth=16, max features=None,

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=82 [CV 5/5; 534/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=120;, score=0.362 total 3.1s[CV 2/5; 538/1000] START bootstrap=True, max depth=16, max features=None, min samples leaf=3, min samples split=5, n estimators=82 [CV 4/5; 536/1000] END bootstrap=True, max depth=10, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=138;, score=0.406 total time= 1.6s [CV 3/5; 538/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=82 [CV 3/5; 536/1000] END bootstrap=True, max\_depth=10, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=138;, score=0.401 total time= 1.7s[CV 4/5; 538/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=82 [CV 5/5; 536/1000] END bootstrap=True, max\_depth=10, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=138;, score=0.406 total time= 1.8s [CV 5/5; 538/1000] START bootstrap=True, max depth=16, max features=None, min samples leaf=3, min samples split=5, n estimators=82 [CV 1/5; 537/1000] END bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=66;, score=0.383 total time= 1.1s[CV 1/5; 539/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=96 [CV 2/5; 537/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=3, n estimators=66;, score=0.401 total [CV 2/5; 539/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=96 [CV 5/5; 537/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=3, n estimators=66;, score=0.385 total time= 1.1s[CV 3/5; 539/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=96 [CV 3/5; 537/1000] END bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=66;, score=0.384 total time= 1.2s [CV 4/5; 539/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=96 [CV 4/5; 537/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=3, n estimators=66;, score=0.360 total time= 1.2s[CV 5/5; 539/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=96 [CV 1/5; 538/1000] END bootstrap=True, max\_depth=16, max\_features=None,

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=82;, score=0.399 total

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time=
        1.3s
[CV 1/5; 540/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 4/5; 538/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=82;, score=0.375 total
        1.2s
time=
[CV 2/5; 540/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 2/5; 538/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=82;, score=0.397 total
time=
      1.3s
[CV 3/5; 540/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 3/5; 538/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=82;, score=0.389 total
time=
      1.3s
[CV 4/5; 540/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 5/5; 538/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=82;, score=0.388 total
time=
      1.2s
[CV 5/5; 540/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 1/5; 540/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30;, score=0.383 total
time=
       0.6s
[CV 1/5; 541/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 2/5; 540/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30;, score=0.367 total
time=
       0.6s
[CV 2/5; 541/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 3/5; 540/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.356 total
time= 0.6s
[CV 3/5; 541/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 1/5; 539/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=96;, score=0.415 total
time=
      1.5s
[CV 4/5; 541/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 4/5; 540/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=30;, score=0.367 total
[CV 5/5; 541/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
```

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=98

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[CV 2/5; 539/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=96;, score=0.389 total
time=
      1.4s
[CV 1/5; 542/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=70
[CV 5/5; 540/1000] END bootstrap=False, max depth=11, max features=None,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.373 total
time= 0.6s
[CV 2/5; 542/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70
[CV 3/5; 539/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=96;, score=0.362 total
time=
      1.3s
[CV 3/5; 542/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70
[CV 4/5; 539/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=96;, score=0.370 total
time= 1.4s
[CV 4/5; 542/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=70
[CV 1/5; 541/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.411 total
time= 0.6s
[CV 5/5; 542/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70
[CV 5/5; 539/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=96;, score=0.372 total
time=
      1.5s
[CV 1/5; 543/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 4/5; 541/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=98;, score=0.407 total
time=
      0.5s
[CV 2/5; 543/1000] START bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=136
[CV 2/5; 541/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.404 total
time=
      0.6s
[CV 3/5; 543/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 3/5; 541/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.398 total
      0.6s
[CV 4/5; 543/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 5/5; 541/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.428 total
```

0.6s

```
[CV 5/5; 543/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136
[CV 1/5; 542/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70;, score=0.383 total
time= 0.6s
[CV 1/5; 544/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=6, n estimators=180
[CV 3/5; 542/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=70;, score=0.378 total
time=
      0.5s
[CV 2/5; 544/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180
[CV 2/5; 542/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=70;, score=0.426 total
       0.6s
[CV 3/5; 544/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180
[CV 4/5; 542/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70;, score=0.389 total
time=
      0.6s
[CV 4/5; 544/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=6, n estimators=180
[CV 5/5; 542/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=70;, score=0.389 total
time= 0.6s
[CV 5/5; 544/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180
[CV 2/5; 543/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.397 total
time=
      1.8s
[CV 1/5; 545/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182
[CV 4/5; 543/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.370 total
time=
      2.1s
[CV 2/5; 545/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=182
[CV 5/5; 543/1000] END bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.376 total
time=
       2.1s
[CV 3/5; 545/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182
[CV 1/5; 543/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.389 total
time=
        2.3s
[CV 4/5; 545/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182
[CV 3/5; 543/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=4, n_estimators=136;, score=0.356 total
time=
       2.3s
[CV 5/5; 545/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182
[CV 1/5; 545/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182;, score=0.404 total
time= 1.0s
[CV 1/5; 546/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=24
[CV 1/5; 546/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=24;, score=0.412 total
time=
       0.3s
[CV 2/5; 546/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 3/5; 545/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182;, score=0.378 total
time=
      1.0s
[CV 3/5; 546/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 2/5; 544/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180;, score=0.365 total
time= 3.0s
[CV 4/5; 546/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 2/5; 545/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182;, score=0.420 total
time=
      1.2s
[CV 5/5; 546/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24
[CV 1/5; 544/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180;, score=0.367 total
[CV 1/5; 547/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 5/5; 544/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180;, score=0.363 total
time= 2.9s
[CV 2/5; 547/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 2/5; 546/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24;, score=0.375 total
      0.3s
time=
[CV 3/5; 547/1000] START bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 3/5; 544/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180;, score=0.348 total
time=
       3.1s
```

[CV 4/5; 547/1000] START bootstrap=True, max depth=15, max features=None,

```
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 4/5; 545/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182;, score=0.395 total
      1.2s
[CV 5/5; 547/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=4, n estimators=14
[CV 4/5; 544/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=180;, score=0.346 total
time=
      3.1s
[CV 1/5; 548/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176
[CV 3/5; 546/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=24;, score=0.353 total
time=
       0.3s
[CV 2/5; 548/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176
[CV 4/5; 546/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=24;, score=0.351 total
time=
      0.3s
[CV 3/5; 548/1000] START bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=176
[CV 2/5; 547/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.411 total
time=
      0.2s
[CV 4/5; 548/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176
[CV 1/5; 547/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=3, min samples split=4, n estimators=14;, score=0.411 total
[CV 5/5; 548/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176
[CV 5/5; 545/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=182;, score=0.378 total
time=
      1.3s
[CV 1/5; 549/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 3/5; 547/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.397 total
time= 0.2s
[CV 4/5; 547/1000] END bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.398 total
time=
       0.2s
[CV 2/5; 549/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 3/5; 549/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 5/5; 547/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=14;, score=0.387 total
```

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time=
        0.2s
[CV 4/5; 549/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 5/5; 546/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=24;, score=0.367 total
       0.4s
time=
[CV 5/5; 549/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84
[CV 1/5; 548/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176;, score=0.412 total
time= 0.7s
[CV 1/5; 550/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184
[CV 3/5; 548/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176;, score=0.381 total
time=
      0.7s
[CV 2/5; 550/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184
[CV 5/5; 548/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=176;, score=0.381 total
time=
      0.7s
[CV 3/5; 550/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184
[CV 4/5; 548/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176;, score=0.373 total
time=
       0.8s
[CV 4/5; 550/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184
[CV 2/5; 548/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=176;, score=0.419 total
time=
      0.8s
[CV 5/5; 550/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184
[CV 1/5; 549/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84;, score=0.396 total
time= 1.0s
[CV 1/5; 551/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 3/5; 549/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84;, score=0.351 total
time=
      1.1s
[CV 2/5; 551/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 4/5; 549/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84;, score=0.376 total
[CV 3/5; 551/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
```

min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=146

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[CV 2/5; 549/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=84;, score=0.381 total
time=
      1.2s
[CV 4/5; 551/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=146
[CV 5/5; 549/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=84;, score=0.367 total
time=
      1.1s
[CV 5/5; 551/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 4/5; 550/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184;, score=0.381 total
time=
       2.1s
[CV 1/5; 552/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192
[CV 2/5; 550/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184;, score=0.382 total
       2.6s
[CV 2/5; 552/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=192
[CV 1/5; 550/1000] END bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=184;, score=0.395 total
time=
       2.7s
[CV 3/5; 552/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192
[CV 5/5; 550/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=184;, score=0.376 total
time=
       2.6s
[CV 4/5; 552/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192
[CV 1/5; 551/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.380 total
time=
      2.4s
[CV 5/5; 552/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=192
[CV 3/5; 550/1000] END bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=184;, score=0.348 total
time=
       2.8s
[CV 1/5; 553/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102
[CV 2/5; 551/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.389 total
[CV 2/5; 553/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102
[CV 4/5; 551/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.348 total
time=
       2.4s
```

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[CV 3/5; 553/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102
[CV 5/5; 551/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.372 total
time= 2.4s
[CV 4/5; 553/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=102
[CV 3/5; 551/1000] END bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=146;, score=0.367 total
time=
       2.6s
[CV 5/5; 553/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102
[CV 1/5; 552/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192;, score=0.395 total
[CV 1/5; 554/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104
[CV 2/5; 553/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102;, score=0.395 total
time=
      0.9s
[CV 2/5; 554/1000] START bootstrap=True, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=104
[CV 1/5; 553/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102;, score=0.401 total
time= 1.0s
[CV 3/5; 554/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104
[CV 3/5; 553/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102;, score=0.370 total
time=
      1.0s
[CV 4/5; 554/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104
[CV 4/5; 553/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102;, score=0.378 total
time= 0.9s
[CV 5/5; 554/1000] START bootstrap=True, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=104
[CV 5/5; 553/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=102;, score=0.384 total
time=
      1.0s
[CV 1/5; 555/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176
[CV 5/5; 552/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192;, score=0.378 total
time=
       1.6s
[CV 2/5; 555/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176
[CV 2/5; 552/1000] END bootstrap=True, max depth=18, max features=sqrt,
```

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min_samples_leaf=1, min_samples_split=9, n_estimators=192;, score=0.403 total
time=
      1.7s
[CV 3/5; 555/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176
[CV 4/5; 552/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192;, score=0.413 total
time= 1.8s
[CV 4/5; 555/1000] START bootstrap=False, max_depth=19, max_features=None,
min samples leaf=1, min samples split=3, n estimators=176
[CV 3/5; 552/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=192;, score=0.376 total
time=
       1.8s
[CV 5/5; 555/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176
[CV 1/5; 554/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104;, score=0.412 total
time=
      1.0s
[CV 1/5; 556/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186
[CV 2/5; 554/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104;, score=0.400 total
time= 1.0s
[CV 2/5; 556/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186
[CV 3/5; 554/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104;, score=0.400 total
time=
      0.9s
[CV 3/5; 556/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186
[CV 4/5; 554/1000] END bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104;, score=0.385 total
time= 1.0s
[CV 4/5; 556/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186
[CV 5/5; 554/1000] END bootstrap=True, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=104;, score=0.388 total
time= 1.0s
[CV 5/5; 556/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186
[CV 4/5; 556/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186;, score=0.363 total
       3.5s
time=
[CV 1/5; 557/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 3/5; 555/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176;, score=0.319 total
time=
       4.1s
[CV 2/5; 557/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
```

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min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 1/5; 557/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.406 total
time= 0.2s
[CV 3/5; 557/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=56
[CV 2/5; 557/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=56;, score=0.411 total
time=
      0.2s
[CV 4/5; 557/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 3/5; 557/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.392 total
time=
       0.2s
[CV 5/5; 557/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=56
[CV 1/5; 556/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186;, score=0.390 total
time=
      4.3s
[CV 1/5; 558/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=126
[CV 2/5; 556/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186;, score=0.351 total
time=
      4.3s
[CV 2/5; 558/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 4/5; 557/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=56;, score=0.389 total
[CV 3/5; 558/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 3/5; 556/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186;, score=0.348 total
time=
       4.3s
[CV 5/5; 557/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=56;, score=0.394 total
time= 0.3s
[CV 4/5; 558/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 5/5; 558/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126
[CV 1/5; 555/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176;, score=0.390 total
time=
       5.1s
[CV 1/5; 559/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116
[CV 5/5; 556/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=186;, score=0.367 total
```

```
4.3s
time=
[CV 2/5; 559/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116
[CV 4/5; 555/1000] END bootstrap=False, max_depth=19, max_features=None,
min samples leaf=1, min samples split=3, n estimators=176;, score=0.325 total
       4.8s
time=
[CV 3/5; 559/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116
[CV 5/5; 555/1000] END bootstrap=False, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176;, score=0.365 total
time= 4.9s
[CV 4/5; 559/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116
[CV 2/5; 555/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=176;, score=0.350 total
time=
      5.2s
[CV 5/5; 559/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116
[CV 1/5; 558/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=126;, score=0.379 total
      1.4s
[CV 1/5; 560/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36
[CV 1/5; 559/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116;, score=0.382 total
time=
       1.2s
[CV 2/5; 560/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36
[CV 3/5; 559/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116;, score=0.388 total
time=
      1.1s
[CV 3/5; 560/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36
[CV 3/5; 558/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=126;, score=0.384 total
time= 1.4s
[CV 5/5; 558/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.389 total
time=
      1.3s
[CV 4/5; 560/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36
[CV 5/5; 560/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36
[CV 2/5; 559/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116;, score=0.387 total
[CV 1/5; 561/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
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min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=188

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[CV 2/5; 558/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=126;, score=0.416 total
time=
      1.5s
[CV 2/5; 561/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=188[CV 4/5; 558/1000] END
bootstrap=True, max depth=None, max features=sqrt, min samples leaf=1,
min samples split=7, n estimators=126;, score=0.392 total time=
[CV 3/5; 561/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188
[CV 4/5; 559/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=116;, score=0.373 total
time=
      1.1s
[CV 4/5; 561/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188
[CV 1/5; 560/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36;, score=0.405 total
time= 0.4s
[CV 5/5; 561/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=188
[CV 3/5; 560/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=5, n estimators=36;, score=0.397 total
time= 0.3s
[CV 1/5; 562/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146
[CV 4/5; 560/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=5, n estimators=36;, score=0.367 total
time=
       0.3s
[CV 2/5; 562/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146
[CV 2/5; 560/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=36;, score=0.387 total
time=
      0.4s
[CV 3/5; 562/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=8, n estimators=146
[CV 5/5; 559/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=116;, score=0.384 total
time=
      1.2s
[CV 4/5; 562/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146
[CV 5/5; 560/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=5, n estimators=36;, score=0.394 total
      0.4s
[CV 5/5; 562/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146
[CV 1/5; 561/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188;, score=0.409 total
```

1.1s

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[CV 1/5; 563/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 3/5; 561/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188;, score=0.350 total
time= 1.1s
[CV 2/5; 563/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=146
[CV 2/5; 561/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=188;, score=0.398 total
time=
      1.1s
[CV 3/5; 563/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 4/5; 561/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188;, score=0.365 total
[CV 4/5; 563/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 5/5; 561/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=188;, score=0.407 total
time=
      1.1s
[CV 5/5; 563/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=146
[CV 1/5; 563/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=146;, score=0.395 total
time= 1.3s
[CV 1/5; 564/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=170
[CV 2/5; 563/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.423 total
time=
      1.3s
[CV 2/5; 564/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=170
[CV 3/5; 563/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.378 total
time=
      1.4s
[CV 3/5; 564/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=2, n estimators=170
[CV 4/5; 563/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.389 total
time=
      1.4s
[CV 4/5; 564/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=170
[CV 5/5; 563/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.384 total
time=
       1.3s
[CV 5/5; 564/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=170
[CV 1/5; 562/1000] END bootstrap=False, max_depth=15, max_features=None,
```

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min_samples_leaf=2, min_samples_split=8, n_estimators=146;, score=0.396 total
time=
      3.3s
[CV 1/5; 565/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110
[CV 2/5; 562/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146;, score=0.375 total
time= 3.3s
[CV 2/5; 565/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=110
[CV 3/5; 562/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146;, score=0.331 total
       3.4s
time=
[CV 3/5; 565/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110
[CV 4/5; 562/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146;, score=0.348 total
time=
       3.5s
[CV 4/5; 565/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110
[CV 5/5; 562/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=146;, score=0.376 total
time=
       3.6s
[CV 5/5; 565/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110
[CV 2/5; 565/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110;, score=0.401 total
time=
      0.9s
[CV 1/5; 566/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 1/5; 565/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110;, score=0.396 total
      1.1s
[CV 2/5; 566/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 3/5; 565/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110;, score=0.388 total
time= 1.0s
[CV 3/5; 566/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 4/5; 565/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110;, score=0.379 total
time=
      1.1s
[CV 4/5; 566/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 5/5; 565/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=110;, score=0.381 total
time=
      1.1s
```

[CV 5/5; 566/1000] START bootstrap=True, max depth=15, max features=None,

min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=44 [CV 1/5; 566/1000] END bootstrap=True, max depth=15, max features=None, min samples leaf=1, min samples split=9, n estimators=44;, score=0.409 total time= 0.7s[CV 1/5; 567/1000] START bootstrap=False, max depth=14, max features=None, min samples leaf=1, min samples split=3, n estimators=64 [CV 2/5; 566/1000] END bootstrap=True, max depth=15, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=44;, score=0.422 total time= 0.7s[CV 2/5; 567/1000] START bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=64 [CV 3/5; 566/1000] END bootstrap=True, max depth=15, max features=None, min samples leaf=1, min samples split=9, n estimators=44;, score=0.379 total time= 0.6s [CV 3/5; 567/1000] START bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=64 [CV 4/5; 566/1000] END bootstrap=True, max\_depth=15, max\_features=None, min samples leaf=1, min samples split=9, n estimators=44;, score=0.391 total time= 0.7s [CV 4/5; 567/1000] START bootstrap=False, max depth=14, max features=None, min samples leaf=1, min samples split=3, n estimators=64 [CV 5/5; 566/1000] END bootstrap=True, max depth=15, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=44;, score=0.382 total time= 0.7s [CV 5/5; 567/1000] START bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=64 [CV 1/5; 564/1000] END bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=170;, score=0.393 total [CV 1/5; 568/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=74 [CV 2/5; 564/1000] END bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=170;, score=0.362 total time= 3.8s [CV 2/5; 568/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min samples leaf=3, min samples split=8, n estimators=74 [CV 5/5; 564/1000] END bootstrap=False, max depth=13, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=170;, score=0.376 total time= 3.8s [CV 3/5; 568/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=74 [CV 4/5; 564/1000] END bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=170;, score=0.373 total time= 3.9s[CV 4/5; 568/1000] START bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=74 [CV 3/5; 564/1000] END bootstrap=False, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=170;, score=0.348 total

```
4.0s
time=
[CV 5/5; 568/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 1/5; 567/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=1, min samples split=3, n estimators=64;, score=0.392 total
time=
        1.4s
[CV 1/5; 569/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 3/5; 567/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.337 total
time=
      1.4s
[CV 2/5; 569/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 2/5; 568/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.395 total
time=
      0.6s
[CV 3/5; 569/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 1/5; 568/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=74;, score=0.396 total
time=
      0.7s
[CV 4/5; 569/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 2/5; 567/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.362 total
time=
       1.6s
[CV 5/5; 569/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86
[CV 4/5; 567/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.340 total
time=
      1.5s
[CV 1/5; 570/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=82
[CV 1/5; 569/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=86;, score=0.425 total
time= 0.5s
[CV 2/5; 570/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=82
[CV 3/5; 568/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.385 total
time=
      0.8s
[CV 3/5; 570/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=82
[CV 5/5; 568/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.401 total
[CV 4/5; 570/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
```

min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=82

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[CV 5/5; 567/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.363 total
time=
      1.5s
[CV 5/5; 570/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=82
[CV 4/5; 568/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=74;, score=0.394 total
time= 0.8s
[CV 1/5; 571/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 2/5; 569/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=86;, score=0.394 total
time=
      0.5s
[CV 2/5; 571/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 3/5; 569/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=86;, score=0.378 total
time= 0.5s
[CV 3/5; 571/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=14
[CV 4/5; 569/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=86;, score=0.385 total
time= 0.5s
[CV 4/5; 571/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 1/5; 571/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=14;, score=0.409 total
time=
      0.1s
[CV 5/5; 571/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14
[CV 2/5; 571/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.382 total
time=
      0.1s
[CV 1/5; 572/1000] START bootstrap=True, max_depth=13, max_features=None,
min samples leaf=2, min samples split=8, n estimators=156
[CV 5/5; 569/1000] END bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=86;, score=0.397 total
time=
      0.5s
[CV 2/5; 572/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156
[CV 3/5; 571/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=14;, score=0.378 total
      0.1s
[CV 3/5; 572/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156
[CV 4/5; 571/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.394 total
```

0.1s

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[CV 4/5; 572/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156
[CV 5/5; 571/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=14;, score=0.384 total
time= 0.1s
[CV 5/5; 572/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=156
[CV 1/5; 570/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=82;, score=0.411 total
time=
      0.8s
[CV 1/5; 573/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 2/5; 570/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=82;, score=0.392 total
[CV 2/5; 573/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 3/5; 570/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=82;, score=0.366 total
time=
      0.8s
[CV 3/5; 573/1000] START bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=44
[CV 5/5; 570/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=82;, score=0.381 total
time= 0.7s
[CV 4/5; 573/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 4/5; 570/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=82;, score=0.376 total
time=
      0.8s
[CV 5/5; 573/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44
[CV 2/5; 573/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44;, score=0.388 total
time= 0.4s
[CV 1/5; 574/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=7, n estimators=164
[CV 1/5; 573/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44;, score=0.415 total
time=
      0.4s
[CV 2/5; 574/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 3/5; 573/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=44;, score=0.365 total
time=
       0.4s
[CV 3/5; 574/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 4/5; 573/1000] END bootstrap=False, max depth=9, max features=sqrt,
```

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min samples leaf=1, min samples split=9, n estimators=44;, score=0.387 total
time=
      0.3s
[CV 4/5; 574/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164
[CV 5/5; 573/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=44;, score=0.387 total
time= 0.4s
[CV 5/5; 574/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=7, n estimators=164
[CV 1/5; 572/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156;, score=0.401 total
time=
       1.8s
[CV 1/5; 575/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4
[CV 1/5; 575/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4;, score=0.425 total
time=
      0.0s
[CV 2/5; 575/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4
[CV 2/5; 575/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4;, score=0.394 total
time= 0.0s
[CV 3/5; 575/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4
[CV 3/5; 575/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4;, score=0.408 total
time=
      0.0s
[CV 4/5; 575/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4
[CV 4/5; 575/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4;, score=0.373 total
time= 0.0s
[CV 5/5; 575/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4
[CV 5/5; 575/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=4;, score=0.379 total
time= 0.0s
[CV 1/5; 576/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=68
[CV 3/5; 572/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156;, score=0.387 total
       2.2s
time=
[CV 2/5; 576/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=68
[CV 4/5; 572/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156;, score=0.401 total
time=
       2.2s
```

[CV 3/5; 576/1000] START bootstrap=True, max\_depth=8, max\_features=sqrt,

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min_samples_leaf=2, min_samples_split=8, n_estimators=68
[CV 2/5; 572/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156;, score=0.398 total
time=
       2.2s
[CV 4/5; 576/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=68
[CV 1/5; 576/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=68;, score=0.427 total
time=
      0.3s
[CV 5/5; 576/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=68
[CV 5/5; 572/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=156;, score=0.389 total
time=
        2.2s
[CV 1/5; 577/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 2/5; 576/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=68;, score=0.429 total
time=
      0.4s
[CV 2/5; 577/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=7, n estimators=96
[CV 5/5; 576/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=68;, score=0.392 total
time=
      0.3s
[CV 3/5; 577/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 3/5; 576/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=68;, score=0.391 total
[CV 4/5; 577/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 4/5; 576/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=68;, score=0.392 total
time=
      0.4s
[CV 5/5; 577/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=96
[CV 4/5; 574/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.381 total
time=
       2.3s
[CV 1/5; 578/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188
[CV 5/5; 574/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.378 total
time=
       2.3s
[CV 2/5; 578/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188
[CV 1/5; 574/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.409 total
```

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time=
        2.6s
[CV 3/5; 578/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188
[CV 2/5; 574/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=164;, score=0.404 total
time=
        2.7s
[CV 4/5; 578/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188
[CV 3/5; 574/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=164;, score=0.375 total
time=
       2.7s
[CV 5/5; 578/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188
[CV 3/5; 577/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.378 total
time=
      1.3s
[CV 1/5; 579/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64
[CV 1/5; 577/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.392 total
time=
      1.6s
[CV 2/5; 579/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64
[CV 2/5; 577/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.406 total
time=
       1.5s
[CV 3/5; 579/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64
[CV 4/5; 577/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.385 total
time=
      1.5s
[CV 4/5; 579/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64
[CV 5/5; 577/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.384 total
time=
      1.5s
[CV 5/5; 579/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64
[CV 1/5; 579/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64;, score=0.409 total
time=
      0.7s
[CV 1/5; 580/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116
[CV 2/5; 578/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188;, score=0.411 total
[CV 2/5; 580/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116
```

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[CV 1/5; 578/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188;, score=0.383 total
time=
      1.4s
[CV 3/5; 580/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=2, min samples split=6, n estimators=116
[CV 2/5; 579/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64;, score=0.392 total
time=
      0.9s
[CV 4/5; 580/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116
[CV 4/5; 578/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188;, score=0.408 total
time=
      1.3s
[CV 5/5; 580/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116
[CV 3/5; 578/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188;, score=0.382 total
time= 1.4s
[CV 1/5; 581/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=7, n estimators=102
[CV 3/5; 579/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=4, n estimators=64;, score=0.381 total
time= 0.8s
[CV 2/5; 581/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 5/5; 578/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=188;, score=0.404 total
time=
      1.4s
[CV 3/5; 581/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 4/5; 579/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=64;, score=0.389 total
time=
      0.8s
[CV 4/5; 581/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=7, n estimators=102
[CV 5/5; 579/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=4, n estimators=64;, score=0.384 total
time=
      0.8s
[CV 5/5; 581/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102
[CV 1/5; 581/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.392 total
      1.4s
[CV 1/5; 582/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 2/5; 581/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.407 total
time=
      1.4s
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[CV 2/5; 582/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 3/5; 581/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.387 total
time= 1.4s
[CV 3/5; 582/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=146
[CV 4/5; 581/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=7, n estimators=102;, score=0.404 total
time=
      1.3s
[CV 4/5; 582/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 5/5; 581/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=102;, score=0.373 total
[CV 5/5; 582/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146
[CV 1/5; 580/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116;, score=0.373 total
time=
      2.5s
[CV 1/5; 583/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=28
[CV 1/5; 582/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.395 total
time= 1.1s
[CV 2/5; 583/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 2/5; 582/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.410 total
time=
      1.0s
[CV 3/5; 583/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 3/5; 580/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116;, score=0.344 total
time=
      2.7s
[CV 4/5; 583/1000] START bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=28
[CV 1/5; 583/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=28;, score=0.412 total
time=
      0.2s
[CV 5/5; 583/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=28
[CV 3/5; 582/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.391 total
time=
       1.1s
[CV 1/5; 584/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 4/5; 582/1000] END bootstrap=True, max depth=11, max features=sqrt,
```

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min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.387 total
time=
      1.1s
[CV 2/5; 584/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 5/5; 582/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=146;, score=0.389 total
time= 1.1s
[CV 3/5; 584/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=166
[CV 2/5; 583/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=28;, score=0.384 total
time=
       0.3s
[CV 4/5; 584/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 3/5; 583/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=28;, score=0.370 total
time=
      0.3s
[CV 5/5; 584/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 4/5; 583/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=28;, score=0.382 total
time= 0.3s
[CV 1/5; 585/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46
[CV 5/5; 583/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=28;, score=0.378 total
time=
      0.3s
[CV 2/5; 585/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46
[CV 2/5; 580/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116;, score=0.365 total
[CV 3/5; 585/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46
[CV 4/5; 580/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116;, score=0.347 total
time= 2.9s
[CV 4/5; 585/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46
[CV 5/5; 580/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=116;, score=0.359 total
       3.0s
time=
[CV 5/5; 585/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46
[CV 2/5; 585/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=46;, score=0.398 total
time=
       0.4s
[CV 1/5; 586/1000] START bootstrap=False, max depth=7, max features=None,
```

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min_samples_leaf=2, min_samples_split=5, n_estimators=114
[CV 1/5; 585/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=46;, score=0.427 total
time= 0.4s
[CV 2/5; 586/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=2, min samples split=5, n estimators=114
[CV 3/5; 585/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=46;, score=0.407 total
time=
      0.5s
[CV 3/5; 586/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114
[CV 4/5; 585/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=46;, score=0.397 total
time=
       0.5s
[CV 4/5; 586/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114
[CV 5/5; 585/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=46;, score=0.372 total
time=
      0.5s
[CV 5/5; 586/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=2, min samples split=5, n estimators=114
[CV 1/5; 586/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114;, score=0.401 total
time=
      1.3s
[CV 1/5; 587/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110
[CV 2/5; 586/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114;, score=0.384 total
[CV 2/5; 587/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110
[CV 2/5; 584/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.375 total
time=
       2.1s
[CV 3/5; 587/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110
[CV 1/5; 584/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.401 total
time=
       2.1s
[CV 4/5; 587/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110
[CV 3/5; 584/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.354 total
time=
       2.1s
[CV 5/5; 587/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110
[CV 4/5; 584/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.370 total
```

```
time=
        2.1s
[CV 1/5; 588/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 5/5; 584/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=166;, score=0.373 total
time=
        2.1s
[CV 2/5; 588/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 3/5; 586/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114;, score=0.346 total
time=
      1.6s
[CV 3/5; 588/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 4/5; 586/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=114;, score=0.367 total
time=
      1.6s
[CV 4/5; 588/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 5/5; 586/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=2, min samples split=5, n estimators=114;, score=0.369 total
time=
      1.6s
[CV 5/5; 588/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140
[CV 1/5; 588/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.395 total
time=
       1.3s
[CV 1/5; 589/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18
[CV 2/5; 588/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.394 total
time=
      1.3s
[CV 2/5; 589/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18
[CV 3/5; 588/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=140;, score=0.376 total
      1.3s
time=
[CV 3/5; 589/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18
[CV 4/5; 588/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.379 total
time=
      1.3s
[CV 4/5; 589/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18
[CV 5/5; 588/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=140;, score=0.388 total
[CV 5/5; 589/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18
```

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[CV 1/5; 589/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18;, score=0.386 total
time=
      0.4s
[CV 1/5; 590/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=16
[CV 2/5; 589/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=6, n estimators=18;, score=0.372 total
time= 0.4s
[CV 2/5; 590/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=16
[CV 3/5; 589/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=6, n estimators=18;, score=0.357 total
time=
      0.4s
[CV 3/5; 590/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=16
[CV 4/5; 589/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18;, score=0.370 total
time= 0.4s
[CV 4/5; 590/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=16
[CV 1/5; 590/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=16;, score=0.408 total
      0.2s
[CV 5/5; 590/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=16
[CV 2/5; 590/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=16;, score=0.385 total
time=
      0.2s
[CV 1/5; 591/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152
[CV 5/5; 589/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=18;, score=0.387 total
time=
      0.4s
[CV 2/5; 591/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=152
[CV 1/5; 587/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=2, min samples split=3, n estimators=110;, score=0.389 total
time=
       2.4s
[CV 3/5; 591/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152
```

[CV 4/5; 590/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=16;, score=0.350 total time= 0.2s

[CV 3/5; 590/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=16;, score=0.370 total

[CV 4/5; 591/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=152

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[CV 5/5; 591/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152
[CV 5/5; 590/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=16;, score=0.369 total
time= 0.2s
[CV 1/5; 592/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=5, n estimators=152
[CV 2/5; 587/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=2, min samples split=3, n estimators=110;, score=0.375 total
time=
       2.5s
[CV 2/5; 592/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152
[CV 4/5; 587/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110;, score=0.337 total
[CV 3/5; 592/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152
[CV 3/5; 587/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=110;, score=0.334 total
time=
      2.9s
[CV 4/5; 592/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=5, n estimators=152
[CV 5/5; 587/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=2, min samples split=3, n estimators=110;, score=0.351 total
time=
       2.8s
[CV 5/5; 592/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152
[CV 2/5; 592/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152;, score=0.414 total
time=
      0.9s
[CV 1/5; 593/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 1/5; 592/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152;, score=0.418 total
time=
      1.1s
[CV 2/5; 593/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=9, n estimators=130
[CV 3/5; 592/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152;, score=0.392 total
time=
      1.1s
[CV 3/5; 593/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 4/5; 592/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152;, score=0.370 total
time=
      1.1s
[CV 4/5; 593/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 3/5; 591/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
```

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min_samples_leaf=1, min_samples_split=2, n_estimators=152;, score=0.346 total
time=
      1.7s
[CV 5/5; 593/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130
[CV 5/5; 592/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=152;, score=0.385 total
time= 1.1s
[CV 1/5; 594/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=8, n estimators=146
[CV 1/5; 591/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152;, score=0.401 total
       2.0s
[CV 2/5; 591/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152;, score=0.388 total
[CV 2/5; 594/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 3/5; 594/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 5/5; 591/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152;, score=0.367 total
time=
       2.0s
[CV 4/5; 594/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=8, n estimators=146
[CV 4/5; 591/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=152;, score=0.376 total
time=
      2.0s
[CV 5/5; 594/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146
[CV 1/5; 593/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.382 total
      1.8s
[CV 1/5; 595/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 2/5; 593/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.391 total
time=
       2.0s
[CV 2/5; 595/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 5/5; 593/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.387 total
time=
      1.6s
[CV 3/5; 595/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 3/5; 593/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.381 total
time=
       2.0s
[CV 4/5; 595/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
```

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min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 4/5; 593/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=130;, score=0.391 total
       2.0s
[CV 5/5; 595/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98
[CV 1/5; 594/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.374 total
time=
       2.3s
[CV 1/5; 596/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 1/5; 595/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.409 total
time=
       1.2s
[CV 2/5; 596/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 3/5; 594/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.353 total
time=
      2.3s
[CV 3/5; 596/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=9, n estimators=196
[CV 2/5; 594/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.367 total
time=
       2.3s
[CV 4/5; 596/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 4/5; 594/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.354 total
[CV 5/5; 596/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196
[CV 5/5; 594/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=146;, score=0.366 total
time=
       2.3s
[CV 1/5; 597/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=142
[CV 3/5; 595/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98;, score=0.351 total
time= 1.2s
[CV 2/5; 597/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=142
[CV 2/5; 595/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.369 total
time=
       1.4s
[CV 3/5; 597/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=142
[CV 4/5; 595/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.367 total
```

time= 1.4s[CV 4/5; 597/1000] START bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142 [CV 5/5; 595/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=98;, score=0.370 total time= 1.4s [CV 5/5; 597/1000] START bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142 [CV 2/5; 597/1000] END bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142;, score=0.417 total time= 1.0s[CV 1/5; 598/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58 [CV 1/5; 597/1000] END bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142;, score=0.392 total time= 1.3s [CV 2/5; 598/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58 [CV 3/5; 597/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min samples leaf=3, min samples split=6, n estimators=142;, score=0.360 total time= 1.2s [CV 3/5; 598/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58 [CV 4/5; 597/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142;, score=0.389 total time= 1.2s [CV 4/5; 598/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58 [CV 5/5; 597/1000] END bootstrap=True, max depth=16, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=142;, score=0.387 total time= 1.2s [CV 5/5; 598/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58 [CV 1/5; 598/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=2, min samples split=9, n estimators=58;, score=0.385 total time= 1.0s[CV 1/5; 599/1000] START bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=42 [CV 2/5; 598/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58;, score=0.379 total time= 1.1s[CV 2/5; 599/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=42 [CV 3/5; 598/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=58;, score=0.356 total [CV 3/5; 599/1000] START bootstrap=False, max\_depth=16, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=42

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[CV 5/5; 596/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.379 total
time=
       2.8s
[CV 4/5; 599/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=42
[CV 1/5; 596/1000] END bootstrap=True, max depth=19, max features=None,
min samples leaf=3, min samples split=9, n estimators=196;, score=0.396 total
time=
       3.3s
[CV 5/5; 599/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=42
[CV 4/5; 596/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.381 total
time=
       3.1s
[CV 1/5; 600/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 2/5; 596/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.401 total
      3.2s
[CV 2/5; 600/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=5, n estimators=114
[CV 4/5; 598/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=9, n estimators=58;, score=0.369 total
time=
      1.2s
[CV 3/5; 600/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 3/5; 596/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=196;, score=0.378 total
time=
        3.3s
[CV 4/5; 600/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114
[CV 5/5; 598/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=58;, score=0.365 total
time=
      1.2s
[CV 5/5; 600/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=5, n estimators=114
[CV 1/5; 599/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.387 total
time=
      1.1s
[CV 1/5; 601/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54
[CV 2/5; 599/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.378 total
      1.0s
[CV 2/5; 601/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54
[CV 3/5; 599/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=42;, score=0.329 total
```

1.0s

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[CV 3/5; 601/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54
[CV 4/5; 599/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=42;, score=0.316 total
time= 1.1s
[CV 4/5; 601/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=54
[CV 2/5; 601/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=54;, score=0.410 total
time=
      0.6s
[CV 5/5; 601/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54
[CV 5/5; 599/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.344 total
[CV 1/5; 602/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160
[CV 1/5; 601/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54;, score=0.398 total
time=
      0.8s
[CV 2/5; 602/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=160
[CV 3/5; 601/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54;, score=0.357 total
time= 0.6s
[CV 3/5; 602/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160
[CV 4/5; 601/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=54;, score=0.378 total
time=
      0.7s
[CV 4/5; 602/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160
[CV 5/5; 601/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=54;, score=0.382 total
time=
      0.6s
[CV 5/5; 602/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=160
[CV 3/5; 602/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160;, score=0.373 total
time=
      1.2s
[CV 1/5; 603/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162
[CV 2/5; 602/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160;, score=0.401 total
time=
       1.5s
[CV 2/5; 603/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162
[CV 1/5; 602/1000] END bootstrap=True, max depth=19, max features=sqrt,
```

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min_samples_leaf=3, min_samples_split=5, n_estimators=160;, score=0.398 total
time=
      1.5s
[CV 3/5; 603/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162
[CV 5/5; 602/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160;, score=0.382 total
time= 1.2s
[CV 4/5; 603/1000] START bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=162
[CV 4/5; 602/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=160;, score=0.384 total
time=
[CV 5/5; 603/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162
[CV 4/5; 600/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.322 total
time=
       2.8s
[CV 1/5; 604/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182
[CV 1/5; 600/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=5, n estimators=114;, score=0.382 total
time=
       3.0s
[CV 2/5; 604/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=182
[CV 2/5; 600/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.375 total
time=
      3.0s
[CV 3/5; 604/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182
[CV 3/5; 600/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.328 total
[CV 4/5; 604/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182
[CV 5/5; 600/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=114;, score=0.351 total
time=
       2.9s
[CV 5/5; 604/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182
[CV 2/5; 603/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162;, score=0.398 total
      1.4s
time=
[CV 1/5; 605/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 1/5; 603/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162;, score=0.377 total
time=
      1.8s
[CV 2/5; 605/1000] START bootstrap=True, max depth=16, max features=None,
```

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min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 4/5; 603/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162;, score=0.362 total
      1.5s
[CV 3/5; 605/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=6, n estimators=94
[CV 3/5; 603/1000] END bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162;, score=0.369 total
time=
      1.8s
[CV 4/5; 605/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 5/5; 603/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=162;, score=0.375 total
time=
       1.7s
[CV 5/5; 605/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 2/5; 604/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182;, score=0.379 total
time=
      1.9s
[CV 1/5; 606/1000] START bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=80
[CV 1/5; 604/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182;, score=0.404 total
time=
      1.9s
[CV 2/5; 606/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80
[CV 3/5; 604/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182;, score=0.363 total
[CV 3/5; 606/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80
[CV 4/5; 604/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182;, score=0.384 total
time=
      1.9s
[CV 4/5; 606/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80
[CV 5/5; 604/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=182;, score=0.363 total
time= 1.9s
[CV 5/5; 606/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80
[CV 1/5; 605/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=6, n estimators=94;, score=0.398 total
time=
      1.3s
[CV 1/5; 607/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20
[CV 1/5; 607/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=2, min samples split=7, n estimators=20;, score=0.396 total
```

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time=
        0.3s
[CV 2/5; 607/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20
[CV 2/5; 605/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=6, n estimators=94;, score=0.403 total
time=
        1.5s
[CV 3/5; 607/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20
[CV 3/5; 605/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.373 total
time=
      1.3s
[CV 4/5; 607/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20
[CV 1/5; 606/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80;, score=0.401 total
time=
      0.9s
[CV 2/5; 606/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=80;, score=0.373 total
time=
      0.9s
[CV 5/5; 607/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=2, min samples split=7, n estimators=20
[CV 1/5; 608/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170
[CV 3/5; 606/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80;, score=0.359 total
time=
       0.9s
[CV 2/5; 608/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170
[CV 4/5; 606/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=80;, score=0.378 total
time=
      0.9s
[CV 3/5; 608/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170
[CV 5/5; 606/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=80;, score=0.385 total
time= 0.9s
[CV 4/5; 608/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170
[CV 2/5; 607/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20;, score=0.416 total
time=
      0.3s
[CV 5/5; 608/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170
[CV 4/5; 605/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.387 total
[CV 1/5; 609/1000] START bootstrap=True, max_depth=18, max_features=None,
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min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=138

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[CV 4/5; 607/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=20;, score=0.376 total
time=
      0.3s
[CV 2/5; 609/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=6, n estimators=138
[CV 3/5; 607/1000] END bootstrap=True, max depth=19, max features=None,
min samples leaf=2, min samples split=7, n estimators=20;, score=0.400 total
time=
      0.4s
[CV 3/5; 609/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=138
[CV 5/5; 607/1000] END bootstrap=True, max depth=19, max features=None,
min samples leaf=2, min samples split=7, n estimators=20;, score=0.388 total
time=
      0.3s
[CV 4/5; 609/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=138
[CV 5/5; 605/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.379 total
time= 1.5s
[CV 5/5; 609/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=6, n estimators=138
[CV 2/5; 609/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=6, n estimators=138;, score=0.387 total
      1.9s
[CV 1/5; 610/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162
[CV 5/5; 608/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170;, score=0.392 total
time=
       2.0s
[CV 2/5; 610/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162
[CV 1/5; 609/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=138;, score=0.387 total
time=
      2.3s
[CV 3/5; 610/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=162
[CV 1/5; 608/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=9, n estimators=170;, score=0.401 total
time=
       2.5s
[CV 4/5; 610/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162
[CV 4/5; 608/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170;, score=0.392 total
[CV 5/5; 610/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162
[CV 2/5; 608/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170;, score=0.404 total
```

2.5s

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[CV 1/5; 611/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 4/5; 609/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=138;, score=0.367 total
time= 2.2s
[CV 2/5; 611/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78
[CV 3/5; 609/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=6, n estimators=138;, score=0.367 total
time=
       2.4s
[CV 3/5; 611/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 3/5; 608/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=170;, score=0.382 total
[CV 4/5; 611/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 5/5; 609/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=138;, score=0.381 total
time=
       2.3s
[CV 5/5; 611/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78
[CV 2/5; 610/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162;, score=0.387 total
time= 1.4s
[CV 1/5; 612/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 1/5; 610/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162;, score=0.414 total
time=
      1.4s
[CV 2/5; 612/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 1/5; 611/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78;, score=0.408 total
time=
      0.9s
[CV 3/5; 612/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=166
[CV 2/5; 611/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78;, score=0.388 total
time=
      0.9s
[CV 4/5; 612/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 3/5; 611/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78;, score=0.357 total
time=
       0.9s
[CV 5/5; 612/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166
[CV 4/5; 611/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
```

```
min samples leaf=1, min samples split=8, n estimators=78;, score=0.381 total
time=
      0.9s
[CV 1/5; 613/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 5/5; 611/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78;, score=0.373 total
time= 0.9s
[CV 2/5; 613/1000] START bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=5, n estimators=120
[CV 3/5; 610/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162;, score=0.372 total
time=
       1.6s
[CV 3/5; 613/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 4/5; 610/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162;, score=0.379 total
time=
      1.6s
[CV 4/5; 613/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 5/5; 610/1000] END bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=162;, score=0.389 total
time= 1.6s
[CV 5/5; 613/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 1/5; 612/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.409 total
time=
      0.8s
[CV 1/5; 614/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176
[CV 2/5; 612/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.401 total
time= 0.8s
[CV 2/5; 614/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176
[CV 3/5; 612/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.387 total
time= 1.0s
[CV 4/5; 612/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.408 total
time= 1.0s
[CV 3/5; 614/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176
[CV 4/5; 614/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176
[CV 5/5; 612/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=166;, score=0.382 total
time=
      1.0s
[CV 5/5; 614/1000] START bootstrap=False, max_depth=18, max_features=None,
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min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=176 [CV 1/5; 613/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.376 total time= 1.9s[CV 1/5; 615/1000] START bootstrap=False, max depth=16, max features=None, min samples leaf=2, min samples split=9, n estimators=8 [CV 2/5; 613/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.367 total time= 1.9s[CV 2/5; 615/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8 [CV 1/5; 615/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8;, score=0.390 total time= 0.2s [CV 3/5; 615/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8 [CV 2/5; 615/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8;, score=0.391 total time= 0.2s [CV 4/5; 615/1000] START bootstrap=False, max depth=16, max features=None, min samples leaf=2, min samples split=9, n estimators=8 [CV 3/5; 615/1000] END bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8;, score=0.327 total time= 0.2s [CV 5/5; 615/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8 [CV 4/5; 615/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8;, score=0.329 total [CV 1/5; 616/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=96 [CV 3/5; 613/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.353 total time= 1.9s [CV 4/5; 613/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.357 total time= 1.9s[CV 2/5; 616/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=96 [CV 3/5; 616/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=96 [CV 5/5; 615/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=8;, score=0.356 total time= 0.2s[CV 4/5; 616/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=96 [CV 5/5; 613/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.370 total

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time=
        1.9s
[CV 5/5; 616/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 2/5; 616/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.384 total
time=
        1.6s
[CV 1/5; 617/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12
[CV 5/5; 616/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.366 total
time=
      1.6s
[CV 2/5; 617/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12
[CV 4/5; 616/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.351 total
time=
      1.6s
[CV 3/5; 617/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12
[CV 1/5; 617/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=12;, score=0.382 total
time=
      0.1s
[CV 4/5; 617/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12
[CV 3/5; 616/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.362 total
time=
       1.7s
[CV 5/5; 617/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12
[CV 2/5; 617/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12;, score=0.392 total
time=
      0.1s
[CV 1/5; 618/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=10
[CV 3/5; 617/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=12;, score=0.385 total
time= 0.1s
[CV 2/5; 618/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=10
[CV 4/5; 617/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12;, score=0.373 total
time=
      0.1s
[CV 3/5; 618/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=10
[CV 1/5; 616/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.383 total
[CV 4/5; 618/1000] START bootstrap=False, max_depth=5, max_features=None,
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min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=10

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[CV 5/5; 617/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=12;, score=0.406 total
time=
      0.1s
[CV 5/5; 618/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=2, n estimators=10
[CV 1/5; 618/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=2, n estimators=10;, score=0.405 total
time= 0.1s
[CV 1/5; 619/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34
[CV 2/5; 618/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=2, n estimators=10;, score=0.387 total
time=
      0.1s
[CV 2/5; 619/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34
[CV 3/5; 618/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=10;, score=0.397 total
time= 0.1s
[CV 3/5; 619/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=34
[CV 4/5; 618/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=2, n estimators=10;, score=0.367 total
time= 0.1s
[CV 4/5; 619/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34
[CV 5/5; 618/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=2, n estimators=10;, score=0.394 total
time=
       0.1s
[CV 5/5; 619/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34
[CV 1/5; 619/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34;, score=0.418 total
time=
      0.4s
[CV 1/5; 620/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=1, min samples split=7, n estimators=152
[CV 4/5; 619/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=34;, score=0.366 total
time=
      0.4s
[CV 2/5; 620/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=152
[CV 2/5; 619/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=34;, score=0.369 total
      0.4s
[CV 3/5; 620/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=152
[CV 3/5; 619/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34;, score=0.343 total
```

0.4s

```
[CV 4/5; 620/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=152
[CV 5/5; 619/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=34;, score=0.378 total
time= 0.4s
[CV 5/5; 620/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=1, min samples split=7, n estimators=152
[CV 2/5; 614/1000] END bootstrap=False, max depth=18, max features=None,
min samples leaf=1, min samples split=7, n estimators=176;, score=0.362 total
time=
      4.1s
[CV 1/5; 621/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110
[CV 1/5; 614/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176;, score=0.376 total
[CV 2/5; 621/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110
[CV 4/5; 614/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176;, score=0.322 total
time=
      4.6s
[CV 3/5; 621/1000] START bootstrap=False, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=110
[CV 5/5; 614/1000] END bootstrap=False, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176;, score=0.362 total
time= 4.7s
[CV 4/5; 621/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110
[CV 3/5; 614/1000] END bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=176;, score=0.329 total
time=
      4.9s
[CV 5/5; 621/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110
[CV 2/5; 621/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110;, score=0.387 total
time=
      1.3s
[CV 1/5; 622/1000] START bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=174
[CV 1/5; 621/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110;, score=0.393 total
time=
      1.5s
[CV 2/5; 622/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=174
[CV 3/5; 621/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=110;, score=0.353 total
time=
       1.7s
[CV 3/5; 622/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=174
[CV 4/5; 621/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
```

min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=110;, score=0.357 total time= 1.6s [CV 4/5; 622/1000] START bootstrap=True, max depth=14, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=174 [CV 1/5; 622/1000] END bootstrap=True, max depth=14, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=174;, score=0.390 total time= 1.2s[CV 5/5; 622/1000] START bootstrap=True, max depth=14, max features=sqrt, min samples leaf=1, min samples split=4, n estimators=174 [CV 5/5; 621/1000] END bootstrap=False, max\_depth=18, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=110;, score=0.360 total 1.7s time= [CV 1/5; 623/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=42 [CV 2/5; 622/1000] END bootstrap=True, max depth=14, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=174;, score=0.422 total time= 1.2s [CV 2/5; 623/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=42 [CV 4/5; 620/1000] END bootstrap=False, max depth=10, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=152;, score=0.343 total time= 2.8s [CV 3/5; 623/1000] START bootstrap=False, max\_depth=5, max\_features=sqrt, min samples leaf=3, min samples split=8, n estimators=42 [CV 1/5; 620/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=152;, score=0.379 total time= 2.8s [CV 4/5; 623/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=42 [CV 2/5; 620/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=152;, score=0.363 total 2.9s [CV 5/5; 623/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=42 [CV 3/5; 620/1000] END bootstrap=False, max depth=10, max features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=152;, score=0.334 total time= 2.9s[CV 1/5; 624/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=68 [CV 5/5; 620/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=152;, score=0.362 total 2.9s time= [CV 2/5; 624/1000] START bootstrap=True, max depth=18, max features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=68 [CV 1/5; 623/1000] END bootstrap=False, max\_depth=5, max\_features=sqrt, min samples leaf=3, min samples split=8, n estimators=42;, score=0.412 total time= 0.2s [CV 3/5; 624/1000] START bootstrap=True, max depth=18, max features=None,

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min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 2/5; 623/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42;, score=0.403 total
time= 0.2s
[CV 4/5; 624/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=8, n estimators=68
[CV 3/5; 623/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=42;, score=0.360 total
time=
      0.2s
[CV 5/5; 624/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 4/5; 623/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42;, score=0.367 total
time=
       0.2s
[CV 1/5; 625/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 5/5; 623/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=42;, score=0.407 total
time=
      0.2s
[CV 2/5; 625/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=6, n estimators=194
[CV 1/5; 624/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=68;, score=0.399 total
time=
      0.9s
[CV 3/5; 625/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 4/5; 624/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=8, n estimators=68;, score=0.376 total
[CV 4/5; 625/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 3/5; 622/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=174;, score=0.370 total
time=
      1.5s
[CV 5/5; 625/1000] START bootstrap=False, max_depth=9, max_features=None,
min samples leaf=1, min samples split=6, n estimators=194
[CV 2/5; 624/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=68;, score=0.407 total
time= 1.1s
[CV 1/5; 626/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 4/5; 622/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=174;, score=0.392 total
time=
      1.5s
[CV 2/5; 626/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 3/5; 624/1000] END bootstrap=True, max_depth=18, max_features=None,
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min samples leaf=3, min samples split=8, n estimators=68;, score=0.388 total

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time=
        1.1s
[CV 5/5; 622/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=174;, score=0.378 total
      1.4s
[CV 3/5; 626/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=174
[CV 4/5; 626/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 5/5; 624/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=68;, score=0.385 total
time=
      1.1s
[CV 5/5; 626/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174
[CV 1/5; 626/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.386 total
time=
      1.4s
[CV 1/5; 627/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54
[CV 2/5; 626/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=174;, score=0.420 total
time=
      1.4s
[CV 2/5; 627/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54
[CV 4/5; 626/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.410 total
time=
       1.4s
[CV 3/5; 627/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54
[CV 3/5; 626/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=174;, score=0.385 total
time=
      1.4s
[CV 4/5; 627/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54
[CV 5/5; 626/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=174;, score=0.387 total
time= 1.4s
[CV 5/5; 627/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54
[CV 1/5; 627/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54;, score=0.399 total
time=
      0.9s
[CV 1/5; 628/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188
[CV 2/5; 627/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54;, score=0.411 total
[CV 2/5; 628/1000] START bootstrap=False, max_depth=10, max_features=None,
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min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=188

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[CV 4/5; 627/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=54;, score=0.379 total
time=
      0.8s
[CV 3/5; 628/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=3, min samples split=2, n estimators=188
[CV 3/5; 627/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=3, n estimators=54;, score=0.362 total
time= 0.9s
[CV 4/5; 628/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188
[CV 5/5; 627/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=2, min samples split=3, n estimators=54;, score=0.370 total
time=
      0.9s
[CV 5/5; 628/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188
[CV 1/5; 625/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.367 total
      3.3s
[CV 1/5; 629/1000] START bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=3, n estimators=66
[CV 2/5; 625/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=6, n estimators=194;, score=0.365 total
time=
      3.4s
[CV 2/5; 629/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66
[CV 3/5; 625/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.348 total
time=
       2.8s
[CV 3/5; 629/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66
[CV 4/5; 625/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.346 total
time=
      2.8s
[CV 4/5; 629/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=3, n estimators=66
[CV 5/5; 625/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=6, n estimators=194;, score=0.363 total
time=
       3.4s
[CV 5/5; 629/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66
[CV 1/5; 629/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=3, n estimators=66;, score=0.402 total
      1.0s
[CV 1/5; 630/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6
[CV 2/5; 629/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66;, score=0.389 total
```

1.0s

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[CV 2/5; 630/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6
[CV 1/5; 630/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6;, score=0.383 total
time= 0.0s
[CV 3/5; 630/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=6
[CV 2/5; 630/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=6;, score=0.388 total
time=
      0.0s
[CV 4/5; 630/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6
[CV 3/5; 630/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6;, score=0.391 total
[CV 5/5; 630/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6
[CV 4/5; 630/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6;, score=0.376 total
time=
      0.0s
[CV 1/5; 631/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=102
[CV 5/5; 630/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=6;, score=0.392 total
time= 0.0s
[CV 2/5; 631/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102
[CV 4/5; 629/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=3, n estimators=66;, score=0.381 total
time=
      0.8s
[CV 3/5; 631/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102
[CV 3/5; 629/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66;, score=0.381 total
time=
      1.0s
[CV 4/5; 631/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=102
[CV 5/5; 629/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=66;, score=0.381 total
time=
      1.0s
[CV 5/5; 631/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102
[CV 3/5; 631/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102;, score=0.395 total
time=
       0.7s
[CV 1/5; 632/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128
[CV 1/5; 631/1000] END bootstrap=True, max depth=13, max features=sqrt,
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min_samples_leaf=1, min_samples_split=7, n_estimators=102;, score=0.411 total
time=
      0.8s
[CV 2/5; 632/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128
[CV 2/5; 631/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102;, score=0.406 total
time= 0.8s
[CV 3/5; 632/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=128
[CV 4/5; 631/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=102;, score=0.401 total
time=
       0.8s
[CV 4/5; 632/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128
[CV 1/5; 632/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128;, score=0.417 total
time=
      0.7s
[CV 5/5; 632/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128
[CV 5/5; 631/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=102;, score=0.394 total
time= 0.8s
[CV 1/5; 633/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 2/5; 632/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128;, score=0.397 total
time=
      0.7s
[CV 2/5; 633/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 3/5; 632/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128;, score=0.384 total
      0.7s
[CV 3/5; 633/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 4/5; 632/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128;, score=0.408 total
time= 0.7s
[CV 4/5; 633/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 5/5; 628/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188;, score=0.357 total
       2.9s
time=
[CV 5/5; 633/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 5/5; 632/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=128;, score=0.385 total
time=
       0.6s
[CV 1/5; 634/1000] START bootstrap=True, max depth=12, max features=None,
```

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min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 1/5; 628/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188;, score=0.377 total
time=
      3.5s
[CV 2/5; 634/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=8, n estimators=66
[CV 4/5; 628/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188;, score=0.347 total
time=
      3.4s
[CV 3/5; 634/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 2/5; 628/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188;, score=0.365 total
time=
        3.5s
[CV 4/5; 634/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 3/5; 628/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=188;, score=0.332 total
time=
      3.5s
[CV 5/5; 634/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=8, n estimators=66
[CV 1/5; 633/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.396 total
time=
      0.9s
[CV 1/5; 635/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 2/5; 633/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.420 total
[CV 2/5; 635/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 3/5; 633/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.369 total
time=
      0.9s
[CV 3/5; 635/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=50
[CV 5/5; 633/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.417 total
time= 0.8s
[CV 4/5; 635/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 4/5; 633/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.392 total
time=
      0.9s
[CV 5/5; 635/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 1/5; 634/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=8, n estimators=66;, score=0.396 total
```

time= 0.8s [CV 1/5; 636/1000] START bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=58 [CV 4/5; 635/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min samples leaf=3, min samples split=2, n estimators=50;, score=0.378 total time= 0.4s[CV 2/5; 636/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=58 [CV 1/5; 635/1000] END bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=50;, score=0.380 total time= 0.5s[CV 3/5; 636/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=58 [CV 2/5; 635/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=50;, score=0.407 total time= 0.5s [CV 4/5; 636/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=58 [CV 3/5; 635/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min samples leaf=3, min samples split=2, n estimators=50;, score=0.388 total time= 0.5s [CV 5/5; 636/1000] START bootstrap=True, max depth=13, max features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=58 [CV 5/5; 635/1000] END bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=50;, score=0.366 total time= 0.5s[CV 1/5; 637/1000] START bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=178 [CV 2/5; 634/1000] END bootstrap=True, max depth=12, max features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=66;, score=0.400 total time= 0.9s[CV 2/5; 637/1000] START bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=178 [CV 4/5; 634/1000] END bootstrap=True, max\_depth=12, max\_features=None, min samples leaf=3, min samples split=8, n estimators=66;, score=0.394 total time= 0.9s[CV 3/5; 634/1000] END bootstrap=True, max depth=12, max features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=66;, score=0.376 total time= 0.9s[CV 3/5; 637/1000] START bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=178 [CV 4/5; 637/1000] START bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=178 [CV 5/5; 634/1000] END bootstrap=True, max depth=12, max features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=66;, score=0.382 total [CV 5/5; 637/1000] START bootstrap=True, max\_depth=8, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=178

```
[CV 1/5; 636/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=58;, score=0.414 total
time=
      0.8s
[CV 1/5; 638/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=126
[CV 2/5; 636/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=58;, score=0.398 total
time=
      0.7s
[CV 2/5; 638/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126
[CV 3/5; 636/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=58;, score=0.373 total
time=
      0.8s
[CV 3/5; 638/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126
[CV 4/5; 636/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=58;, score=0.388 total
time= 0.8s
[CV 4/5; 638/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=126
[CV 5/5; 636/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=2, min samples split=8, n estimators=58;, score=0.378 total
time=
      0.8s
[CV 5/5; 638/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126
[CV 1/5; 638/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126;, score=0.402 total
time=
      0.9s
[CV 1/5; 639/1000] START bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 2/5; 638/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126;, score=0.411 total
time= 1.0s
[CV 2/5; 639/1000] START bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94
[CV 4/5; 638/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=126;, score=0.403 total
time=
      0.9s
[CV 3/5; 639/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 3/5; 638/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126;, score=0.385 total
      0.9s
[CV 4/5; 639/1000] START bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 5/5; 638/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=126;, score=0.373 total
```

0.9s

```
[CV 5/5; 639/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94
[CV 1/5; 637/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.412 total
time= 1.8s
[CV 1/5; 640/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=76
[CV 4/5; 637/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=178;, score=0.400 total
time=
      1.8s
[CV 2/5; 640/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=76
[CV 2/5; 637/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.411 total
[CV 3/5; 640/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=76
[CV 5/5; 637/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.400 total
time=
      1.8s
[CV 4/5; 640/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=76
[CV 3/5; 637/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=178;, score=0.398 total
time=
       2.0s
[CV 5/5; 640/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=76
[CV 2/5; 640/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=76;, score=0.388 total
time=
      0.6s
[CV 1/5; 641/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44
[CV 1/5; 640/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=76;, score=0.406 total
time= 0.6s
[CV 2/5; 641/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=44
[CV 3/5; 640/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=76;, score=0.356 total
time=
      0.6s
[CV 3/5; 641/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44
[CV 4/5; 640/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=76;, score=0.382 total
time=
       0.6s
[CV 4/5; 641/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44
[CV 5/5; 640/1000] END bootstrap=False, max depth=8, max features=sqrt,
```

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min samples leaf=1, min samples split=5, n estimators=76;, score=0.392 total
time=
      0.7s
[CV 5/5; 641/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44
[CV 1/5; 641/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44;, score=0.390 total
time= 0.4s
[CV 1/5; 642/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=8, n estimators=184
[CV 2/5; 641/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=44;, score=0.414 total
       0.4s
time=
[CV 2/5; 642/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184
[CV 3/5; 641/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=44;, score=0.385 total
time=
      0.5s
[CV 3/5; 642/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184
[CV 4/5; 641/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=44;, score=0.423 total
time= 0.4s
[CV 4/5; 642/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=8, n estimators=184
[CV 5/5; 641/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=44;, score=0.391 total
time=
      0.4s
[CV 5/5; 642/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184
[CV 1/5; 639/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.382 total
      1.9s
[CV 1/5; 643/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=88
[CV 4/5; 639/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94;, score=0.337 total
time=
       2.2s
[CV 2/5; 643/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=88
[CV 2/5; 639/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=94;, score=0.372 total
       2.2s
time=
[CV 3/5; 643/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=88
[CV 5/5; 639/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.369 total
time=
       2.1s
```

[CV 4/5; 643/1000] START bootstrap=True, max depth=11, max features=None,

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min_samples_leaf=1, min_samples_split=6, n_estimators=88
[CV 3/5; 639/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=3, n estimators=94;, score=0.346 total
time=
       2.2s
[CV 5/5; 643/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=6, n estimators=88
[CV 1/5; 643/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=88;, score=0.414 total
time=
      0.9s
[CV 1/5; 644/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 4/5; 643/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=6, n estimators=88;, score=0.401 total
time=
      1.0s
[CV 2/5; 644/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 2/5; 643/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=6, n estimators=88;, score=0.403 total
time=
      1.1s
[CV 3/5; 644/1000] START bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=164
[CV 3/5; 643/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=88;, score=0.382 total
time=
      1.1s
[CV 4/5; 644/1000] START bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 5/5; 643/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=6, n estimators=88;, score=0.376 total
[CV 5/5; 644/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 2/5; 642/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184;, score=0.406 total
time=
       2.3s
[CV 1/5; 645/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=12
[CV 1/5; 642/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184;, score=0.398 total
time=
       2.3s
[CV 2/5; 645/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12
[CV 1/5; 645/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=12;, score=0.385 total
time=
       0.1s
[CV 3/5; 645/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12
[CV 2/5; 645/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=12;, score=0.419 total
```

```
time=
        0.1s
[CV 4/5; 645/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12
[CV 3/5; 642/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=8, n estimators=184;, score=0.392 total
time=
        2.3s
[CV 5/5; 645/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12
[CV 4/5; 642/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=184;, score=0.404 total
time=
       2.3s
[CV 1/5; 646/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98
[CV 3/5; 645/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12;, score=0.387 total
time=
      0.1s
[CV 2/5; 646/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98
[CV 5/5; 642/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=8, n estimators=184;, score=0.391 total
time=
       2.3s
[CV 3/5; 646/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98
[CV 4/5; 645/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12;, score=0.422 total
time=
       0.1s
[CV 4/5; 646/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98
[CV 5/5; 645/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=12;, score=0.375 total
time=
      0.1s
[CV 5/5; 646/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98
[CV 1/5; 644/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=164;, score=0.399 total
      1.3s
time=
[CV 1/5; 647/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130
[CV 2/5; 644/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.394 total
time=
      1.4s
[CV 2/5; 647/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130
[CV 2/5; 646/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98;, score=0.382 total
[CV 3/5; 647/1000] START bootstrap=True, max_depth=16, max_features=None,
```

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=130

```
[CV 1/5; 646/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98;, score=0.402 total
time=
      1.0s
[CV 4/5; 647/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=8, n estimators=130
[CV 3/5; 646/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=98;, score=0.384 total
time=
      1.0s
[CV 5/5; 647/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130
[CV 5/5; 646/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=98;, score=0.378 total
time=
      1.0s
[CV 1/5; 648/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 4/5; 646/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=98;, score=0.385 total
time= 1.0s
[CV 2/5; 648/1000] START bootstrap=True, max_depth=9, max_features=None,
min samples leaf=2, min samples split=2, n estimators=120
[CV 4/5; 644/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=164;, score=0.373 total
time=
      1.5s
[CV 3/5; 648/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 3/5; 644/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.362 total
time=
       1.6s
[CV 4/5; 648/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120
[CV 5/5; 644/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.367 total
time=
      1.5s
[CV 5/5; 648/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=2, min samples split=2, n estimators=120
[CV 1/5; 647/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=1, min samples split=8, n estimators=130;, score=0.402 total
time=
      1.8s
[CV 1/5; 649/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92
[CV 1/5; 648/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.402 total
      1.2s
[CV 2/5; 649/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92
[CV 2/5; 648/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.404 total
time=
      1.4s
```

```
[CV 3/5; 649/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92
[CV 4/5; 648/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.388 total
time= 1.3s
[CV 4/5; 649/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=92
[CV 3/5; 648/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=2, min samples split=2, n estimators=120;, score=0.406 total
time=
      1.4s
[CV 5/5; 649/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92
[CV 5/5; 648/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=120;, score=0.388 total
[CV 1/5; 650/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34
[CV 1/5; 649/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92;, score=0.393 total
      0.7s[CV 1/5; 650/1000] END bootstrap=False, max depth=5,
max_features=sqrt, min_samples_leaf=2, min_samples_split=4, n_estimators=34;,
score=0.406 total time=
[CV 2/5; 650/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34
[CV 3/5; 650/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34
[CV 2/5; 647/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130;, score=0.404 total
time=
      1.9s
[CV 4/5; 650/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34
[CV 2/5; 650/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34;, score=0.401 total
time= 0.2s
[CV 5/5; 650/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=34
[CV 4/5; 650/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=34;, score=0.394 total
time=
      0.2s
[CV 1/5; 651/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=18
[CV 2/5; 649/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=92;, score=0.420 total
time=
       0.7s
[CV 2/5; 651/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=18
[CV 3/5; 650/1000] END bootstrap=False, max depth=5, max features=sqrt,
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min samples leaf=2, min samples split=4, n estimators=34;, score=0.360 total
time=
      0.3s
[CV 3/5; 651/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=18
[CV 4/5; 647/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130;, score=0.381 total
time= 2.1s
[CV 4/5; 651/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=18
[CV 5/5; 650/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=34;, score=0.401 total
       0.2s
time=
[CV 5/5; 651/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=18
[CV 3/5; 647/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130;, score=0.375 total
        2.2s[CV 1/5; 651/1000] END bootstrap=False, max_depth=16,
max_features=sqrt, min_samples_leaf=3, min_samples_split=4, n_estimators=18;,
score=0.405 total time=
[CV 1/5; 652/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=92
[CV 5/5; 647/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=130;, score=0.375 total
time=
       2.2s
[CV 2/5; 652/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92
[CV 3/5; 652/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92
[CV 3/5; 649/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=92;, score=0.385 total
      0.7s
[CV 4/5; 652/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92
[CV 4/5; 649/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92;, score=0.400 total
time= 0.7s
[CV 5/5; 652/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92
[CV 2/5; 651/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=18;, score=0.385 total
      0.2s
time=
[CV 1/5; 653/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166
[CV 3/5; 651/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=18;, score=0.357 total
time=
       0.3s
[CV 2/5; 653/1000] START bootstrap=False, max depth=9, max features=None,
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min_samples_leaf=1, min_samples_split=3, n_estimators=166
[CV 5/5; 649/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=92;, score=0.387 total
time= 0.8s
[CV 3/5; 653/1000] START bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=3, n estimators=166
[CV 4/5; 651/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=18;, score=0.372 total
time=
      0.2s
[CV 4/5; 653/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166
[CV 5/5; 651/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=18;, score=0.365 total
time=
       0.3s
[CV 5/5; 653/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166
[CV 1/5; 652/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=92;, score=0.402 total
time=
      0.8s
[CV 1/5; 654/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=3, min samples split=5, n estimators=170
[CV 4/5; 652/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92;, score=0.382 total
time=
      0.8s
[CV 2/5; 654/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170
[CV 2/5; 652/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=92;, score=0.406 total
[CV 3/5; 654/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170
[CV 5/5; 652/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=92;, score=0.397 total
time=
      0.8s
[CV 3/5; 652/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=92;, score=0.363 total
time= 0.8s
[CV 4/5; 654/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170
[CV 5/5; 654/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170
[CV 3/5; 653/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166;, score=0.344 total
time=
       2.5s
[CV 1/5; 655/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154
[CV 2/5; 653/1000] END bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166;, score=0.363 total
```

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time=
        2.6s
[CV 2/5; 655/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154
[CV 1/5; 653/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=1, min samples split=3, n estimators=166;, score=0.377 total
time=
        2.8s
[CV 3/5; 655/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154
[CV 4/5; 653/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166;, score=0.347 total
time=
       2.9s
[CV 4/5; 655/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154
[CV 5/5; 653/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=166;, score=0.365 total
time=
       2.9s
[CV 5/5; 655/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154
[CV 1/5; 654/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=5, n estimators=170;, score=0.395 total
time=
       2.6s
[CV 1/5; 656/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178
[CV 4/5; 654/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170;, score=0.367 total
time=
       2.7s
[CV 2/5; 656/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178
[CV 2/5; 654/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170;, score=0.398 total
time=
       2.8s
[CV 3/5; 656/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178
[CV 1/5; 655/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=154;, score=0.406 total
time= 1.0s
[CV 4/5; 656/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178
[CV 3/5; 654/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170;, score=0.378 total
time=
       2.9s
[CV 5/5; 656/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178
[CV 5/5; 654/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=170;, score=0.385 total
[CV 1/5; 657/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
```

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[CV 2/5; 655/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154;, score=0.387 total
      1.1s
time=
[CV 2/5; 657/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88
[CV 3/5; 655/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=154;, score=0.362 total
time=
      1.2s
[CV 3/5; 657/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 4/5; 655/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154;, score=0.394 total
time=
      1.2s
[CV 4/5; 657/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=88
[CV 5/5; 655/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=154;, score=0.387 total
      1.2s
[CV 5/5; 657/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88
[CV 2/5; 657/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88;, score=0.395 total
time=
      0.7s
[CV 1/5; 658/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102
[CV 1/5; 657/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88;, score=0.402 total
time=
       0.8s
[CV 2/5; 658/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102
[CV 1/5; 658/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102;, score=0.411 total
time=
      0.4s
[CV 3/5; 657/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88;, score=0.382 total
time= 0.8s
[CV 3/5; 658/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102
[CV 4/5; 658/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102
[CV 4/5; 657/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=88;, score=0.397 total
      0.8s
[CV 5/5; 658/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102
[CV 2/5; 658/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102;, score=0.408 total
time=
       0.5s
```

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[CV 1/5; 659/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156
[CV 5/5; 657/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=88;, score=0.392 total
time= 0.8s
[CV 2/5; 659/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=156
[CV 3/5; 658/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=102;, score=0.387 total
time=
      0.4s
[CV 3/5; 659/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156
[CV 4/5; 658/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102;, score=0.385 total
[CV 4/5; 659/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156
[CV 5/5; 658/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=102;, score=0.403 total
time=
      0.4s
[CV 5/5; 659/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=156
[CV 1/5; 656/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178;, score=0.405 total
time=
       2.1s
[CV 1/5; 660/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190
[CV 2/5; 656/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178;, score=0.387 total
time=
       2.2s
[CV 2/5; 660/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190
[CV 3/5; 656/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178;, score=0.362 total
time=
      2.2s
[CV 3/5; 660/1000] START bootstrap=True, max depth=6, max features=None,
min samples leaf=3, min samples split=3, n estimators=190
[CV 4/5; 656/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178;, score=0.382 total
time=
       2.1s
[CV 4/5; 660/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190
[CV 5/5; 656/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=178;, score=0.379 total
time=
        2.3s
[CV 5/5; 660/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190
[CV 1/5; 660/1000] END bootstrap=True, max_depth=6, max_features=None,
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min_samples_leaf=3, min_samples_split=3, n_estimators=190;, score=0.418 total
time=
      1.5s
[CV 1/5; 661/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188
[CV 1/5; 659/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156;, score=0.411 total
time=
       2.2s
[CV 2/5; 661/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=188
[CV 2/5; 660/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190;, score=0.411 total
time=
       1.6s
[CV 3/5; 661/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188
[CV 2/5; 659/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156;, score=0.385 total
time=
       2.2s
[CV 4/5; 661/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188
[CV 3/5; 660/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190;, score=0.403 total
time= 1.6s
[CV 5/5; 661/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188
[CV 4/5; 660/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190;, score=0.379 total
time=
      1.5s
[CV 1/5; 662/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38
[CV 4/5; 659/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156;, score=0.359 total
       2.1s
[CV 2/5; 662/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38
[CV 3/5; 659/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156;, score=0.350 total
time=
       2.1s
[CV 3/5; 662/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38
[CV 5/5; 660/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=190;, score=0.388 total
      1.6s
time=
[CV 4/5; 662/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38
[CV 5/5; 659/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=156;, score=0.362 total
time=
       2.2s
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[CV 5/5; 662/1000] START bootstrap=True, max\_depth=8, max\_features=None,

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min_samples_leaf=2, min_samples_split=6, n_estimators=38
[CV 2/5; 662/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=6, n estimators=38;, score=0.395 total
time= 0.3s
[CV 1/5; 663/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=9, n estimators=124
[CV 1/5; 662/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38;, score=0.421 total
time=
      0.4s
[CV 2/5; 663/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124
[CV 3/5; 662/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=6, n estimators=38;, score=0.403 total
time=
       0.4s
[CV 3/5; 663/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124
[CV 4/5; 662/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=6, n estimators=38;, score=0.404 total
time=
      0.4s
[CV 4/5; 663/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=9, n estimators=124
[CV 5/5; 662/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=38;, score=0.370 total
time=
      0.4s
[CV 5/5; 663/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124
[CV 1/5; 663/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124;, score=0.425 total
[CV 1/5; 664/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=68
[CV 3/5; 663/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124;, score=0.391 total
time=
      0.8s
[CV 2/5; 664/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=68
[CV 2/5; 663/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124;, score=0.408 total
time= 0.9s
[CV 3/5; 664/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=68
[CV 5/5; 663/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124;, score=0.385 total
time=
       0.8s
[CV 4/5; 664/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=68
[CV 2/5; 664/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=68;, score=0.416 total
```

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[CV 1/5; 664/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=68;, score=0.417 total
time= 0.3s
[CV 5/5; 664/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=68
[CV 1/5; 665/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102
[CV 4/5; 663/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=124;, score=0.381 total
time= 0.9s
[CV 2/5; 665/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102
[CV 3/5; 664/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=68;, score=0.379 total
time=
      0.3s
[CV 3/5; 665/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102
[CV 4/5; 664/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=68;, score=0.379 total
      0.3s[CV 5/5; 664/1000] END bootstrap=True, max depth=5,
max features=sqrt, min samples leaf=2, min samples split=6, n estimators=68;,
score=0.398 total time=
                         0.2s
[CV 4/5; 665/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102
[CV 5/5; 665/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102
[CV 5/5; 665/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102;, score=0.376 total
time=
      1.1s
[CV 1/5; 666/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80
[CV 1/5; 665/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=2, n estimators=102;, score=0.398 total
time= 1.4s
[CV 4/5; 665/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102;, score=0.394 total
time= 1.2s
[CV 2/5; 666/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80
[CV 3/5; 666/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80
[CV 2/5; 665/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102;, score=0.413 total
[CV 4/5; 666/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80
```

0.3s

time=

```
[CV 3/5; 665/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=102;, score=0.385 total
time=
      1.4s
[CV 5/5; 666/1000] START bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=9, n estimators=80
[CV 1/5; 661/1000] END bootstrap=False, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=188;, score=0.387 total
time=
       3.7s
[CV 1/5; 667/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6
[CV 2/5; 661/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188;, score=0.362 total
time=
       3.5s
[CV 2/5; 667/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6
[CV 4/5; 661/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188;, score=0.353 total
      3.4s
[CV 3/5; 667/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=6
[CV 1/5; 667/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=6;, score=0.380 total
time= 0.1s
[CV 4/5; 667/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6
[CV 2/5; 667/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6;, score=0.373 total
time=
       0.1s
[CV 5/5; 667/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6
[CV 4/5; 667/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6;, score=0.360 total
time=
      0.1s
[CV 1/5; 668/1000] START bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=182
[CV 3/5; 667/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=6;, score=0.360 total
time=
      0.1s
[CV 2/5; 668/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 3/5; 661/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188;, score=0.332 total
[CV 3/5; 668/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 5/5; 661/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=188;, score=0.360 total
time=
       3.5s
```

```
[CV 4/5; 668/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 5/5; 667/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=6;, score=0.401 total
time= 0.1s
[CV 5/5; 668/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=3, n estimators=182
[CV 4/5; 666/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=3, min samples split=9, n estimators=80;, score=0.351 total
time=
      1.1s
[CV 1/5; 669/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44
[CV 2/5; 666/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=3, min samples split=9, n estimators=80;, score=0.365 total
[CV 2/5; 669/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44
[CV 1/5; 666/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80;, score=0.374 total
time=
      1.4s
[CV 3/5; 669/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=44
[CV 3/5; 666/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=80;, score=0.346 total
time= 1.4s
[CV 4/5; 669/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44
[CV 5/5; 666/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=3, min samples split=9, n estimators=80;, score=0.365 total
time=
      1.4s
[CV 5/5; 669/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44
[CV 1/5; 669/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44;, score=0.395 total
time=
      0.5s
[CV 1/5; 670/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=6
[CV 1/5; 670/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.392 total
time=
      0.0s
[CV 2/5; 670/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 2/5; 669/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=44;, score=0.382 total
time=
       0.5s
[CV 3/5; 670/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 3/5; 670/1000] END bootstrap=True, max depth=12, max features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.373 total
time=
      0.0s
[CV 4/5; 670/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 2/5; 670/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.413 total
time= 0.0s
[CV 5/5; 670/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=6
[CV 4/5; 670/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.367 total
       0.0s
time=
[CV 1/5; 671/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 5/5; 670/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.372 total
time=
      0.1s
[CV 2/5; 671/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 2/5; 668/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.408 total
time= 1.3s
[CV 3/5; 671/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 3/5; 668/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.397 total
time=
      1.3s
[CV 4/5; 671/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 5/5; 668/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.387 total
      1.2s
[CV 5/5; 671/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 1/5; 668/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.417 total
time= 1.3s
[CV 1/5; 672/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176
[CV 4/5; 668/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.373 total
      1.3s
time=
[CV 2/5; 672/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176
[CV 3/5; 669/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=44;, score=0.347 total
time=
       0.6s
[CV 3/5; 672/1000] START bootstrap=True, max depth=20, max features=None,
```

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min_samples_leaf=3, min_samples_split=4, n_estimators=176
[CV 4/5; 669/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=44;, score=0.382 total
time= 0.6s
[CV 4/5; 672/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=3, min samples split=4, n estimators=176
[CV 5/5; 669/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=44;, score=0.379 total
time=
      0.6s
[CV 5/5; 672/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176
[CV 4/5; 672/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176;, score=0.363 total
time=
        2.9s
[CV 1/5; 673/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6
[CV 1/5; 672/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176;, score=0.380 total
time=
      3.0s
[CV 2/5; 673/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=8, n estimators=6
[CV 5/5; 672/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176;, score=0.384 total
time=
       2.9s
[CV 3/5; 673/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6
[CV 1/5; 673/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6;, score=0.396 total
[CV 4/5; 673/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6
[CV 2/5; 673/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6;, score=0.407 total
time=
      0.1s
[CV 5/5; 673/1000] START bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=8, n estimators=6
[CV 2/5; 672/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176;, score=0.397 total
time=
      3.1s
[CV 1/5; 674/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126
[CV 3/5; 672/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=176;, score=0.379 total
time=
       3.0s
[CV 2/5; 674/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126
[CV 3/5; 673/1000] END bootstrap=True, max_depth=10, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=6;, score=0.401 total

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time=
        0.1s
[CV 3/5; 674/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126
[CV 4/5; 673/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=8, n estimators=6;, score=0.404 total
time=
       0.1s
[CV 4/5; 674/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126
[CV 5/5; 673/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=6;, score=0.387 total
time= 0.1s
[CV 5/5; 674/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126
[CV 4/5; 671/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196;, score=0.375 total
time=
      3.3s
[CV 1/5; 675/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170
[CV 5/5; 671/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=196;, score=0.365 total
time=
      3.4s
[CV 2/5; 675/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170
[CV 1/5; 671/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196;, score=0.379 total
time=
       4.1s
[CV 3/5; 675/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170
[CV 3/5; 671/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196;, score=0.357 total
time=
      4.2s
[CV 4/5; 675/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170
[CV 2/5; 671/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=196;, score=0.375 total
      4.2s
time=
[CV 5/5; 675/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170
[CV 2/5; 675/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170;, score=0.387 total
time=
      1.5s
[CV 1/5; 676/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 1/5; 675/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170;, score=0.404 total
[CV 2/5; 676/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
```

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=86

```
[CV 2/5; 674/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126;, score=0.373 total
time=
       2.0s
[CV 3/5; 676/1000] START bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=86
[CV 4/5; 674/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=6, n estimators=126;, score=0.354 total
time=
       2.0s
[CV 4/5; 676/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 3/5; 674/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126;, score=0.351 total
time=
       2.0s
[CV 5/5; 676/1000] START bootstrap=False, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86
[CV 5/5; 674/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=126;, score=0.367 total
       2.0s
[CV 1/5; 677/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26
[CV 1/5; 674/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=6, n estimators=126;, score=0.373 total
time=
      2.1s
[CV 2/5; 677/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 2/5; 677/1000] END bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26;, score=0.397 total
time=
       0.2s
[CV 3/5; 677/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 1/5; 677/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26;, score=0.421 total
time=
      0.3s
[CV 4/5; 677/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26
[CV 3/5; 677/1000] END bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26;, score=0.388 total
time=
      0.2s
[CV 5/5; 677/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 4/5; 677/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26;, score=0.391 total
      0.3s
[CV 1/5; 678/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148
[CV 3/5; 675/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170;, score=0.397 total
```

1.6s

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[CV 2/5; 678/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148
[CV 1/5; 676/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.418 total
time= 0.8s
[CV 3/5; 678/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=1, min samples split=2, n estimators=148
[CV 5/5; 677/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26;, score=0.394 total
time=
      0.2s
[CV 4/5; 678/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148
[CV 4/5; 675/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170;, score=0.367 total
[CV 5/5; 675/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=170;, score=0.394 total
time= 1.8s
[CV 5/5; 678/1000] START bootstrap=False, max_depth=None, max_features=None,
min samples leaf=1, min samples split=2, n estimators=148
[CV 2/5; 676/1000] END bootstrap=False, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=86;, score=0.385 total
time=
      0.9s
[CV 1/5; 679/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106
[CV 2/5; 679/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106
[CV 3/5; 676/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=86;, score=0.366 total
time=
      0.9s
[CV 3/5; 679/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106
[CV 5/5; 676/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.375 total
time=
      0.9s
[CV 4/5; 679/1000] START bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=4, n estimators=106
[CV 4/5; 676/1000] END bootstrap=False, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=86;, score=0.379 total
time=
      1.0s
[CV 5/5; 679/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106
[CV 4/5; 679/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106;, score=0.344 total
time=
        2.5s
[CV 1/5; 680/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148
[CV 2/5; 679/1000] END bootstrap=False, max_depth=15, max_features=None,
```

```
min_samples_leaf=3, min_samples_split=4, n_estimators=106;, score=0.375 total
time=
       2.6s
[CV 3/5; 679/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106;, score=0.343 total
      2.6s
time=
[CV 2/5; 680/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=148
[CV 3/5; 680/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148
[CV 1/5; 679/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106;, score=0.396 total
time=
       2.7s
[CV 4/5; 680/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148
[CV 5/5; 679/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=106;, score=0.384 total
time=
       2.7s
[CV 5/5; 680/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148
[CV 3/5; 678/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148;, score=0.360 total
time= 4.4s
[CV 1/5; 681/1000] START bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=5, n estimators=162
[CV 2/5; 678/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148;, score=0.337 total
time=
      4.5s
[CV 2/5; 681/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162
[CV 4/5; 678/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148;, score=0.337 total
[CV 3/5; 681/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162
[CV 5/5; 678/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148;, score=0.354 total
time= 4.5s
[CV 4/5; 681/1000] START bootstrap=False, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162
[CV 1/5; 680/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148;, score=0.417 total
       2.2s
time=
[CV 5/5; 681/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162
[CV 2/5; 680/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148;, score=0.375 total
time=
       2.1s
```

[CV 1/5; 682/1000] START bootstrap=False, max depth=7, max features=None,

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min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 3/5; 680/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148;, score=0.343 total
time=
       2.2s
[CV 2/5; 682/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=80
[CV 1/5; 678/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=148;, score=0.348 total
time=
      5.1s
[CV 3/5; 682/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 4/5; 680/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148;, score=0.373 total
time=
        2.2s
[CV 4/5; 682/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80
[CV 5/5; 680/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=148;, score=0.378 total
time=
      2.2s
[CV 5/5; 682/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=80
[CV 1/5; 682/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80;, score=0.399 total
time=
      1.1s
[CV 1/5; 683/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=34
[CV 5/5; 682/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.370 total
[CV 2/5; 683/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=34
[CV 2/5; 682/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.379 total
time=
      1.1s
[CV 3/5; 683/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=34
[CV 3/5; 682/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=80;, score=0.346 total
time= 1.1s
[CV 4/5; 683/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=34
[CV 4/5; 682/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=4, n estimators=80;, score=0.367 total
time=
      1.1s
[CV 5/5; 683/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=34
[CV 2/5; 683/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=34;, score=0.401 total
```

time= 0.2s[CV 1/5; 684/1000] START bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12 [CV 1/5; 683/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min samples leaf=2, min samples split=3, n estimators=34;, score=0.414 total time= 0.2s [CV 2/5; 684/1000] START bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12 [CV 3/5; 683/1000] END bootstrap=True, max depth=9, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=34;, score=0.391 total time= 0.2s[CV 3/5; 684/1000] START bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12 [CV 4/5; 683/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=34;, score=0.381 total time= 0.2s[CV 4/5; 684/1000] START bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12 [CV 5/5; 683/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min samples leaf=2, min samples split=3, n estimators=34;, score=0.408 total time= 0.2s [CV 5/5; 684/1000] START bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12 [CV 1/5; 684/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12;, score=0.377 total time= 0.2s [CV 1/5; 685/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=126 [CV 2/5; 684/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12;, score=0.373 total time= 0.2s[CV 2/5; 685/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=126 [CV 3/5; 684/1000] END bootstrap=False, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=5, n estimators=12;, score=0.351 total time= 0.2s[CV 3/5; 685/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=126 [CV 4/5; 684/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12;, score=0.356 total time= 0.2s [CV 4/5; 685/1000] START bootstrap=False, max depth=9, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=126 [CV 5/5; 684/1000] END bootstrap=False, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=12;, score=0.367 total [CV 5/5; 685/1000] START bootstrap=False, max\_depth=9, max\_features=sqrt,

min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=126

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[CV 2/5; 685/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.404 total
time=
      1.0s
[CV 1/5; 686/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=176
[CV 1/5; 685/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=126;, score=0.405 total
time=
      1.1s
[CV 2/5; 686/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176
[CV 2/5; 681/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162;, score=0.362 total
time=
       3.2s
[CV 3/5; 686/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176
[CV 3/5; 685/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.366 total
      1.2s
[CV 4/5; 686/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=176
[CV 4/5; 685/1000] END bootstrap=False, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=126;, score=0.370 total
time=
      1.2s
[CV 5/5; 686/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176
[CV 5/5; 685/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=126;, score=0.389 total
time=
       1.2s
[CV 1/5; 687/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138
[CV 1/5; 681/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162;, score=0.392 total
time=
      3.7s
[CV 2/5; 687/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=1, min samples split=9, n estimators=138
[CV 4/5; 681/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=5, n estimators=162;, score=0.373 total
time=
       3.4s
[CV 3/5; 687/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138
[CV 3/5; 681/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162;, score=0.348 total
[CV 4/5; 687/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138
[CV 5/5; 681/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=162;, score=0.376 total
time=
       3.6s
```

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[CV 5/5; 687/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138
[CV 1/5; 686/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.392 total
time= 1.2s
[CV 1/5; 688/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=26
[CV 1/5; 688/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=26;, score=0.415 total
time=
      0.1s
[CV 2/5; 688/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=26
[CV 3/5; 686/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.369 total
[CV 3/5; 688/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=26
[CV 2/5; 686/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.410 total
time=
      1.3s
[CV 4/5; 688/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=26
[CV 2/5; 688/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=26;, score=0.401 total
time= 0.1s
[CV 5/5; 688/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=26
[CV 5/5; 686/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.400 total
time=
      1.2s
[CV 1/5; 689/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150
[CV 4/5; 688/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=26;, score=0.391 total
time=
      0.2s
[CV 2/5; 689/1000] START bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=150
[CV 4/5; 686/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.387 total
time=
      1.3s
[CV 3/5; 688/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=26;, score=0.357 total
      0.2s
[CV 3/5; 689/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150
[CV 4/5; 689/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150
[CV 5/5; 688/1000] END bootstrap=False, max depth=5, max features=sqrt,
```

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min samples leaf=3, min samples split=9, n estimators=26;, score=0.404 total
time=
      0.1s
[CV 5/5; 689/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150
[CV 1/5; 687/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138;, score=0.409 total
time= 1.6s
[CV 1/5; 690/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=4, n estimators=110
[CV 2/5; 687/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138;, score=0.404 total
       1.5s
time=
[CV 2/5; 690/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110
[CV 3/5; 687/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138;, score=0.401 total
time=
      1.6s
[CV 3/5; 690/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110
[CV 4/5; 687/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138;, score=0.397 total
time= 1.6s
[CV 4/5; 690/1000] START bootstrap=True, max_depth=20, max_features=None,
min samples leaf=2, min samples split=4, n estimators=110
[CV 5/5; 687/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=138;, score=0.385 total
time=
      1.6s
[CV 5/5; 690/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110
[CV 1/5; 690/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110;, score=0.389 total
      1.7s
[CV 1/5; 691/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126
[CV 5/5; 689/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150;, score=0.376 total
time= 2.1s
[CV 2/5; 691/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126
[CV 1/5; 689/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150;, score=0.393 total
       2.4s
time=
[CV 3/5; 691/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126
[CV 2/5; 689/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150;, score=0.373 total
time=
       2.3s
```

[CV 4/5; 691/1000] START bootstrap=True, max depth=14, max features=None,

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min_samples_leaf=3, min_samples_split=2, n_estimators=126
[CV 3/5; 689/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150;, score=0.357 total
      2.4s
[CV 4/5; 689/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=150;, score=0.354 total
[CV 5/5; 691/1000] START bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=2, n estimators=126
[CV 1/5; 692/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=62
[CV 2/5; 690/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110;, score=0.407 total
time=
      1.9s
[CV 2/5; 692/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=62
[CV 4/5; 690/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110;, score=0.381 total
time=
      1.6s
[CV 3/5; 692/1000] START bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=62
[CV 3/5; 690/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110;, score=0.375 total
time=
      2.0s
[CV 4/5; 692/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=62
[CV 1/5; 692/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=62;, score=0.411 total
[CV 5/5; 692/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=62
[CV 5/5; 690/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=110;, score=0.376 total
time=
      1.9s
[CV 2/5; 692/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=62;, score=0.408 total
time= 0.5s
[CV 1/5; 693/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166
[CV 2/5; 693/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166
[CV 3/5; 692/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=62;, score=0.391 total
time=
       0.5s
[CV 3/5; 693/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166
[CV 4/5; 692/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=62;, score=0.397 total
```

```
0.5s
time=
[CV 4/5; 693/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166
[CV 5/5; 692/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=62;, score=0.392 total
time=
       0.5s
[CV 5/5; 693/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166
[CV 1/5; 691/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126;, score=0.402 total
time=
      1.6s
[CV 1/5; 694/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 2/5; 691/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126;, score=0.384 total
time=
      1.6s
[CV 2/5; 694/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 3/5; 691/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=2, n estimators=126;, score=0.391 total
time=
      1.9s
[CV 3/5; 694/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 4/5; 691/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126;, score=0.397 total
time=
       1.8s
[CV 4/5; 694/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 5/5; 691/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=126;, score=0.391 total
time=
      1.8s
[CV 5/5; 694/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 1/5; 694/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=106;, score=0.421 total
time= 0.7s
[CV 1/5; 695/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92
[CV 2/5; 694/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.410 total
time=
      0.6s
[CV 2/5; 695/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92
[CV 3/5; 694/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.392 total
[CV 3/5; 695/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92
```

```
[CV 4/5; 694/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.410 total
time=
      0.7s
[CV 4/5; 695/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=92
[CV 5/5; 694/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=106;, score=0.397 total
time=
      0.6s
[CV 5/5; 695/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92
[CV 1/5; 695/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=92;, score=0.393 total
time=
      1.1s
[CV 1/5; 696/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72
[CV 2/5; 695/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92;, score=0.382 total
time= 1.2s
[CV 2/5; 696/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72
[CV 2/5; 693/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=166;, score=0.373 total
time=
       2.6s
[CV 3/5; 696/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72
[CV 1/5; 693/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166;, score=0.385 total
time=
       2.7s
[CV 4/5; 696/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72
[CV 3/5; 693/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166;, score=0.372 total
time=
      2.7s
[CV 5/5; 696/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72
[CV 4/5; 693/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=166;, score=0.384 total
time=
       2.6s
[CV 1/5; 697/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146
[CV 5/5; 693/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=166;, score=0.370 total
[CV 2/5; 697/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146
[CV 4/5; 695/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92;, score=0.391 total
time=
      1.2s
```

```
[CV 3/5; 697/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146
[CV 3/5; 695/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=92;, score=0.347 total
time= 1.3s
[CV 4/5; 697/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=3, min samples split=5, n estimators=146
[CV 1/5; 696/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.415 total
time=
      0.7s
[CV 5/5; 697/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146
[CV 5/5; 695/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=92;, score=0.378 total
[CV 1/5; 698/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198
[CV 2/5; 696/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72;, score=0.403 total
time=
      0.7s
[CV 2/5; 698/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=198
[CV 3/5; 696/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72;, score=0.403 total
time= 0.7s
[CV 3/5; 698/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198
[CV 4/5; 696/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.401 total
time=
      0.7s
[CV 4/5; 698/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198
[CV 5/5; 696/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72;, score=0.382 total
time=
      0.7s
[CV 5/5; 698/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=198
[CV 5/5; 697/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146;, score=0.373 total
time=
       2.1s
[CV 1/5; 699/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 2/5; 698/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198;, score=0.389 total
time=
        2.2s
[CV 2/5; 699/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 2/5; 697/1000] END bootstrap=True, max depth=20, max features=None,
```

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min_samples_leaf=3, min_samples_split=5, n_estimators=146;, score=0.400 total
time=
       2.5s
[CV 3/5; 699/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 1/5; 697/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146;, score=0.383 total
time= 2.7s
[CV 4/5; 699/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=94
[CV 4/5; 697/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146;, score=0.366 total
       2.4s
time=
[CV 5/5; 699/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94
[CV 3/5; 697/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=146;, score=0.384 total
time=
       2.6s
[CV 1/5; 700/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 1/5; 699/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.421 total
time= 0.4s
[CV 2/5; 700/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 1/5; 698/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198;, score=0.404 total
time=
      2.6s
[CV 3/5; 700/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 3/5; 698/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198;, score=0.353 total
       2.6s
[CV 4/5; 700/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 2/5; 699/1000] END bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.411 total
time= 0.4s
[CV 5/5; 700/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142
[CV 3/5; 699/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=94;, score=0.373 total
      0.5s
time=
[CV 1/5; 701/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=62
[CV 4/5; 699/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=94;, score=0.398 total
time=
      0.5s
```

[CV 2/5; 701/1000] START bootstrap=False, max\_depth=15, max\_features=sqrt,

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min_samples_leaf=3, min_samples_split=4, n_estimators=62
[CV 5/5; 699/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=94;, score=0.387 total
time= 0.5s
[CV 3/5; 701/1000] START bootstrap=False, max depth=15, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=62
[CV 4/5; 698/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=198;, score=0.369 total
time=
       2.5s
[CV 4/5; 701/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=62
[CV 5/5; 698/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=198;, score=0.388 total
time=
        2.5s
[CV 5/5; 701/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=62
[CV 1/5; 701/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=62;, score=0.402 total
time=
      0.8s
[CV 1/5; 702/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=2, n estimators=196
[CV 2/5; 701/1000] END bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=62;, score=0.384 total
time=
      0.8s
[CV 2/5; 702/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196
[CV 3/5; 701/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=62;, score=0.350 total
[CV 3/5; 702/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196
[CV 4/5; 701/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=62;, score=0.382 total
time=
      0.8s
[CV 4/5; 702/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196
[CV 5/5; 701/1000] END bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=62;, score=0.369 total
time= 0.8s
[CV 5/5; 702/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196
[CV 2/5; 700/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.376 total
time=
      1.9s
[CV 1/5; 703/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82
[CV 5/5; 700/1000] END bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.366 total
```

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time=
        2.0s
[CV 2/5; 703/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82
[CV 1/5; 700/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=142;, score=0.380 total
time=
        2.2s
[CV 3/5; 703/1000] START bootstrap=True, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82
[CV 4/5; 700/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.356 total
time=
       2.2s
[CV 4/5; 703/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82
[CV 3/5; 700/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=142;, score=0.347 total
time=
       2.2s
[CV 5/5; 703/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82
[CV 1/5; 703/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=2, min samples split=4, n estimators=82;, score=0.424 total
time=
      0.6s
[CV 1/5; 704/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 3/5; 703/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82;, score=0.391 total
time=
       0.7s
[CV 2/5; 704/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 2/5; 703/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82;, score=0.416 total
time=
       0.8s
[CV 3/5; 704/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 4/5; 703/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=2, min samples split=4, n estimators=82;, score=0.388 total
time= 0.7s
[CV 4/5; 704/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 5/5; 703/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=82;, score=0.400 total
time=
      0.7s
[CV 5/5; 704/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106
[CV 1/5; 704/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.399 total
[CV 1/5; 705/1000] START bootstrap=True, max_depth=5, max_features=None,
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min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=78

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[CV 1/5; 705/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=78;, score=0.418 total
time=
      0.5s
[CV 2/5; 705/1000] START bootstrap=True, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=78
[CV 2/5; 704/1000] END bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=106;, score=0.417 total
time=
      0.8s
[CV 3/5; 705/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 3/5; 704/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.401 total
time=
      0.9s
[CV 4/5; 705/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 4/5; 704/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=106;, score=0.419 total
time= 0.8s
[CV 5/5; 704/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=106;, score=0.388 total
[CV 5/5; 705/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=78
[CV 1/5; 706/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 2/5; 702/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196;, score=0.369 total
time=
        3.0s
[CV 2/5; 706/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 3/5; 702/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196;, score=0.353 total
time=
      3.0s
[CV 3/5; 706/1000] START bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=5, n estimators=44
[CV 2/5; 705/1000] END bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=78;, score=0.406 total
time=
      0.5s
[CV 4/5; 706/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 3/5; 705/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=78;, score=0.387 total
[CV 5/5; 706/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44
[CV 4/5; 702/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196;, score=0.351 total
time=
       3.0s
```

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[CV 1/5; 707/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=70
[CV 5/5; 702/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196;, score=0.366 total
time= 3.1s
[CV 2/5; 707/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=70
[CV 4/5; 705/1000] END bootstrap=True, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=78;, score=0.378 total
time=
      0.5s
[CV 3/5; 707/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=70
[CV 1/5; 702/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=196;, score=0.371 total
[CV 4/5; 707/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=70
[CV 5/5; 705/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=78;, score=0.404 total
time=
      0.6s
[CV 5/5; 707/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=70
[CV 1/5; 706/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=5, n estimators=44;, score=0.420 total
time= 0.7s
[CV 1/5; 708/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160
[CV 1/5; 707/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=70;, score=0.423 total
time=
      0.3s
[CV 2/5; 708/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160
[CV 2/5; 707/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=70;, score=0.408 total
time=
      0.4s
[CV 3/5; 708/1000] START bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=160
[CV 3/5; 707/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=70;, score=0.407 total
time=
      0.3s
[CV 4/5; 708/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160
[CV 4/5; 707/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=70;, score=0.410 total
time=
       0.4s
[CV 5/5; 708/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160
[CV 5/5; 707/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
```

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min samples leaf=2, min samples split=7, n estimators=70;, score=0.385 total
time=
      0.3s
[CV 4/5; 706/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44;, score=0.382 total
time= 0.6s
[CV 2/5; 709/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=2, min samples split=4, n estimators=190
[CV 1/5; 709/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 2/5; 706/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=3, min samples split=5, n estimators=44;, score=0.394 total
       0.7s
time=
[CV 3/5; 709/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 3/5; 706/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=5, n estimators=44;, score=0.375 total
time=
      0.8s
[CV 4/5; 709/1000] START bootstrap=False, max depth=7, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 5/5; 706/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=44;, score=0.378 total
time= 0.7s
[CV 5/5; 709/1000] START bootstrap=False, max_depth=7, max_features=None,
min samples leaf=2, min samples split=4, n estimators=190
[CV 5/5; 708/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160;, score=0.378 total
time=
      1.9s
[CV 1/5; 710/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 2/5; 708/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160;, score=0.389 total
[CV 2/5; 710/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 1/5; 708/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160;, score=0.401 total
time=
       2.3s
[CV 3/5; 710/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 4/5; 708/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160;, score=0.376 total
       2.2s
time=
[CV 4/5; 710/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132
[CV 3/5; 708/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=160;, score=0.346 total
time=
       2.2s
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[CV 5/5; 710/1000] START bootstrap=True, max depth=12, max features=None,

min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=132 [CV 2/5; 709/1000] END bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=190;, score=0.384 total 2.2s [CV 1/5; 711/1000] START bootstrap=False, max depth=16, max features=sqrt, min samples leaf=1, min samples split=4, n estimators=28 [CV 1/5; 711/1000] END bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=28;, score=0.396 total time= 0.3s [CV 2/5; 711/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=28 [CV 1/5; 709/1000] END bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=190;, score=0.401 total time= 2.5s[CV 3/5; 711/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=28 [CV 3/5; 709/1000] END bootstrap=False, max\_depth=7, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=190;, score=0.344 total time= 2.7s[CV 4/5; 711/1000] START bootstrap=False, max depth=16, max features=sqrt, min samples leaf=1, min samples split=4, n estimators=28 [CV 4/5; 709/1000] END bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=190;, score=0.367 total time= 2.6s [CV 5/5; 711/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=28 [CV 5/5; 709/1000] END bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=190;, score=0.369 total [CV 1/5; 712/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=110 [CV 2/5; 711/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=1, min samples split=4, n estimators=28;, score=0.379 total time= 0.3s [CV 2/5; 712/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=110 [CV 3/5; 711/1000] END bootstrap=False, max depth=16, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=28;, score=0.356 total time= 0.4s[CV 3/5; 712/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=110 [CV 4/5; 711/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt, min samples leaf=1, min samples split=4, n estimators=28;, score=0.360 total time= 0.4s[CV 4/5; 712/1000] START bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=110 [CV 5/5; 711/1000] END bootstrap=False, max\_depth=16, max\_features=sqrt,

min samples leaf=1, min samples split=4, n estimators=28;, score=0.351 total

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time= 0.4s

[CV 5/5; 712

min_samples_

[CV 1/5; 710

min_samples_
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[CV 5/5; 712/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=110

[CV 1/5; 710/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=132;, score=0.396 total time= 1.7s

[CV 1/5; 713/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2

[CV 1/5; 713/1000] END bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2;, score=0.399 total time= 0.0s

[CV 2/5; 713/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2

[CV 2/5; 713/1000] END bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2;, score=0.367 total time= 0.0s

[CV 3/5; 713/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2

[CV 3/5; 713/1000] END bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2;, score=0.357 total time= 0.0s

[CV 4/5; 713/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2

[CV 4/5; 713/1000] END bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2;, score=0.369 total time= 0.0s

[CV 5/5; 713/1000] START bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2

[CV 5/5; 713/1000] END bootstrap=False, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=2;, score=0.395 total time= 0.0s

[CV 1/5; 714/1000] START bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2

[CV 2/5; 710/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=132;, score=0.401 total time= 1.8s

[CV 2/5; 714/1000] START bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2

[CV 1/5; 714/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2;, score=0.370 total time= 0.0s

[CV 3/5; 714/1000] START bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2

[CV 2/5; 714/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2;, score=0.353 total time= 0.0s

[CV 3/5; 714/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=2;, score=0.372 total

```
0.0s
time=
[CV 4/5; 714/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=2
[CV 5/5; 714/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=2
[CV 4/5; 714/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=2;, score=0.367 total
time= 0.0s
[CV 5/5; 714/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=2;, score=0.359 total
time= 0.0s
[CV 1/5; 715/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=60
[CV 2/5; 715/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=60
[CV 4/5; 710/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.392 total
      1.8s
[CV 3/5; 715/1000] START bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=7, n estimators=60
[CV 3/5; 710/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.384 total
time=
      1.8s
[CV 4/5; 715/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=60
[CV 5/5; 710/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=132;, score=0.391 total
time=
       1.8s
[CV 5/5; 715/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=60
[CV 2/5; 712/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=110;, score=0.387 total
time=
      1.1s
[CV 1/5; 716/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=7, n estimators=14
[CV 1/5; 712/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=1, min samples split=8, n estimators=110;, score=0.405 total
time=
      1.2s
[CV 2/5; 716/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=14
[CV 1/5; 716/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=7, n estimators=14;, score=0.392 total
[CV 3/5; 716/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=14
[CV 3/5; 712/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=110;, score=0.397 total
time=
      1.2s
```

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[CV 4/5; 716/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=14
[CV 2/5; 716/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=14;, score=0.394 total
time= 0.2s
[CV 5/5; 716/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=14
[CV 4/5; 712/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=8, n estimators=110;, score=0.367 total
time=
      1.1s
[CV 1/5; 717/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 3/5; 716/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=14;, score=0.413 total
[CV 2/5; 717/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 4/5; 716/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=14;, score=0.384 total
time=
      0.2s
[CV 3/5; 717/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=32
[CV 5/5; 712/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=110;, score=0.394 total
time= 1.2s
[CV 4/5; 717/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 5/5; 716/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=14;, score=0.394 total
time=
      0.2s
[CV 5/5; 717/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 1/5; 715/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=60;, score=0.428 total
time= 0.5s
[CV 2/5; 715/1000] END bootstrap=True, max depth=6, max features=None,
min samples leaf=1, min samples split=7, n estimators=60;, score=0.416 total
time=
      0.5s
[CV 1/5; 718/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 2/5; 718/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 3/5; 715/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=1, min samples split=7, n estimators=60;, score=0.392 total
time=
       0.5s
[CV 3/5; 718/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 5/5; 715/1000] END bootstrap=True, max_depth=6, max_features=None,
```

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min_samples_leaf=1, min_samples_split=7, n_estimators=60;, score=0.403 total time= 0.5s
[CV 4/5; 718/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
```

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194

- [CV 4/5; 715/1000] END bootstrap=True, max\_depth=6, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=60;, score=0.385 total time= 0.5s
- [CV 5/5; 718/1000] START bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194
- [CV 1/5; 717/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=32;, score=0.406 total time= 0.2s
- [CV 1/5; 719/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46
- [CV 2/5; 717/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=32;, score=0.404 total time= 0.2s
- [CV 2/5; 719/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46
- [CV 3/5; 717/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=32;, score=0.376 total time= 0.2s
- [CV 3/5; 719/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46
- [CV 4/5; 717/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=32;, score=0.387 total time= 0.2s
- [CV 4/5; 719/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46
- [CV 5/5; 717/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=32;, score=0.388 total time= 0.3s
- [CV 5/5; 719/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46
- [CV 1/5; 719/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46;, score=0.408 total time= 0.6s
- [CV 1/5; 720/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12
- [CV 2/5; 719/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46;, score=0.414 total time= 0.6s
- [CV 2/5; 720/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12
- [CV 4/5; 719/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46;, score=0.375 total time= 0.7s
- [CV 3/5; 720/1000] START bootstrap=False, max\_depth=16, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12 [CV 4/5; 718/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194;, score=0.413 total time= 0.9s[CV 4/5; 720/1000] START bootstrap=False, max depth=16, max features=None, min samples leaf=2, min samples split=6, n estimators=12 [CV 3/5; 719/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46;, score=0.379 total time= 0.7s[CV 5/5; 720/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12 [CV 1/5; 718/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194;, score=0.414 total time= 0.9s[CV 1/5; 721/1000] START bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94 [CV 3/5; 718/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194;, score=0.392 total time= 0.9s [CV 2/5; 721/1000] START bootstrap=False, max depth=6, max features=sqrt, min samples leaf=1, min samples split=5, n estimators=94 [CV 5/5; 719/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=46;, score=0.384 total time= 0.7s [CV 3/5; 721/1000] START bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94 [CV 5/5; 718/1000] END bootstrap=True, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194;, score=0.379 total [CV 4/5; 721/1000] START bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94 [CV 1/5; 720/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=2, min samples split=6, n estimators=12;, score=0.380 total time= 0.3s [CV 5/5; 721/1000] START bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94 [CV 2/5; 718/1000] END bootstrap=True, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=194;, score=0.403 total time= 1.0s[CV 1/5; 722/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22 [CV 2/5; 720/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=2, min samples split=6, n estimators=12;, score=0.381 total time= 0.3s [CV 2/5; 722/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22 [CV 4/5; 720/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=2, min samples split=6, n estimators=12;, score=0.338 total

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time= 0.3s
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- [CV 3/5; 722/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22
- [CV 3/5; 720/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12;, score=0.331 total time= 0.3s
- [CV 4/5; 722/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22
- [CV 5/5; 720/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=12;, score=0.351 total time= 0.3s
- [CV 5/5; 722/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22
- [CV 2/5; 722/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22;, score=0.387 total time= 0.5s
- [CV 1/5; 723/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=114
- [CV 5/5; 721/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94;, score=0.414 total time= 0.6s
- [CV 2/5; 723/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=114
- [CV 1/5; 722/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=22;, score=0.379 total time= 0.6s
- [CV 3/5; 723/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=114
- [CV 1/5; 721/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94;, score=0.408 total time= 0.6s
- [CV 4/5; 723/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=114
- [CV 2/5; 721/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94;, score=0.395 total time= 0.6s
- [CV 5/5; 723/1000] START bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=114
- [CV 3/5; 721/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94;, score=0.357 total time= 0.6s
- [CV 1/5; 724/1000] START bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=10
- [CV 4/5; 721/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=94;, score=0.372 total time= 0.6s
- [CV 2/5; 724/1000] START bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=10

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[CV 1/5; 724/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=10;, score=0.421 total
time=
      0.1s
[CV 3/5; 724/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=10
[CV 2/5; 724/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=10;, score=0.389 total
time= 0.1s
[CV 4/5; 724/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=10
[CV 4/5; 722/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=7, n estimators=22;, score=0.332 total
time=
      0.5s
[CV 5/5; 724/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=10
[CV 3/5; 722/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=22;, score=0.337 total
time= 0.6s
[CV 1/5; 725/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=92
[CV 3/5; 724/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=10;, score=0.341 total
time= 0.1s
[CV 2/5; 725/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92
[CV 4/5; 724/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=10;, score=0.381 total
time=
       0.1s
[CV 3/5; 725/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92
[CV 5/5; 722/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=22;, score=0.360 total
time=
      0.6s
[CV 4/5; 725/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=92
[CV 5/5; 724/1000] END bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=10;, score=0.392 total
time=
      0.1s
[CV 5/5; 725/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92
[CV 2/5; 723/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=114;, score=0.387 total
      1.0s
[CV 1/5; 726/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130
[CV 5/5; 723/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=114;, score=0.394 total
```

time=

1.0s

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[CV 2/5; 726/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130
[CV 1/5; 723/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=114;, score=0.404 total
time= 1.2s
[CV 3/5; 726/1000] START bootstrap=True, max depth=None, max features=None,
min samples leaf=1, min samples split=6, n estimators=130
[CV 3/5; 723/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=9, n estimators=114;, score=0.397 total
time=
      1.2s
[CV 4/5; 726/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130
[CV 2/5; 725/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=92;, score=0.381 total
[CV 1/5; 725/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92;, score=0.408 total
time= 1.0s
[CV 5/5; 726/1000] START bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=6, n estimators=130
[CV 1/5; 727/1000] START bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=198
[CV 4/5; 723/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=114;, score=0.367 total
time= 1.2s
[CV 4/5; 725/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=92;, score=0.389 total
time=
       1.0s
[CV 2/5; 727/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=198
[CV 3/5; 727/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=198
[CV 3/5; 725/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92;, score=0.378 total
time=
      1.0s
[CV 4/5; 727/1000] START bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=198
[CV 5/5; 725/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=92;, score=0.391 total
time=
      1.0s
[CV 5/5; 727/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=198
[CV 1/5; 727/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=198;, score=0.409 total
time=
       1.3s
[CV 1/5; 728/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=134
[CV 3/5; 727/1000] END bootstrap=False, max depth=6, max features=sqrt,
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min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=198;, score=0.356 total time= 1.3s [CV 2/5; 728/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134 [CV 2/5; 727/1000] END bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=198;, score=0.395 total time= 1.4s[CV 3/5; 728/1000] START bootstrap=True, max\_depth=11, max\_features=sqrt, min samples leaf=1, min samples split=9, n estimators=134 [CV 4/5; 727/1000] END bootstrap=False, max\_depth=6, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=198;, score=0.378 total time= 1.3s [CV 4/5; 728/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134 [CV 5/5; 727/1000] END bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=198;, score=0.414 total time= 1.3s [CV 5/5; 728/1000] START bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134 [CV 2/5; 726/1000] END bootstrap=True, max depth=None, max features=None, min samples leaf=1, min samples split=6, n estimators=130;, score=0.423 total time= 2.0s [CV 1/5; 729/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78 [CV 1/5; 726/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=130;, score=0.379 total time= 2.1s[CV 2/5; 729/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78 [CV 1/5; 728/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134;, score=0.409 total 0.9s [CV 3/5; 729/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78 [CV 2/5; 728/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134;, score=0.422 total time= 1.0s[CV 4/5; 729/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78 [CV 4/5; 728/1000] END bootstrap=True, max\_depth=11, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134;, score=0.403 total 1.0s time= [CV 5/5; 729/1000] START bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78 [CV 3/5; 728/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=134;, score=0.389 total time= 1.0s [CV 1/5; 730/1000] START bootstrap=True, max depth=16, max features=sqrt,

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min_samples_leaf=3, min_samples_split=9, n_estimators=24
[CV 4/5; 726/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130;, score=0.362 total
       2.4s
[CV 2/5; 730/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=24
[CV 5/5; 728/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=134;, score=0.403 total
time=
      1.0s
[CV 3/5; 730/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=24
[CV 5/5; 726/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130;, score=0.363 total
time=
        2.4s
[CV 4/5; 730/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=24
[CV 3/5; 726/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=130;, score=0.379 total
time=
      2.5s
[CV 5/5; 730/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=24
[CV 1/5; 730/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=24;, score=0.398 total
time=
      0.2s
[CV 1/5; 731/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=22
[CV 3/5; 730/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=24;, score=0.379 total
[CV 2/5; 731/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=22
[CV 4/5; 730/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=24;, score=0.389 total
time=
      0.2s
[CV 3/5; 731/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=22
[CV 2/5; 730/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=24;, score=0.408 total
time= 0.3s
[CV 4/5; 731/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=22
[CV 5/5; 730/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=24;, score=0.400 total
time=
       0.2s
[CV 5/5; 731/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=22
[CV 1/5; 731/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=22;, score=0.386 total
```

time= 0.4s[CV 1/5; 732/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=140 [CV 2/5; 731/1000] END bootstrap=False, max\_depth=10, max\_features=None, min samples leaf=2, min samples split=2, n estimators=22;, score=0.362 total 0.4s time= [CV 2/5; 732/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=140 [CV 3/5; 731/1000] END bootstrap=False, max depth=10, max features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=22;, score=0.332 total time= 0.4s[CV 3/5; 732/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=140 [CV 4/5; 731/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=22;, score=0.351 total time= 0.4s[CV 4/5; 732/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=140 [CV 5/5; 731/1000] END bootstrap=False, max\_depth=10, max\_features=None, min samples leaf=2, min samples split=2, n estimators=22;, score=0.360 total time= 0.4s[CV 1/5; 729/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78;, score=0.386 total time= 1.3s [CV 5/5; 732/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=140 [CV 1/5; 733/1000] START bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=150 [CV 2/5; 729/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78;, score=0.408 total time= 1.4s[CV 2/5; 733/1000] START bootstrap=False, max\_depth=7, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=150 [CV 5/5; 729/1000] END bootstrap=True, max\_depth=16, max\_features=None, min samples leaf=1, min samples split=4, n estimators=78;, score=0.375 total time= 1.3s [CV 3/5; 733/1000] START bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=150 [CV 4/5; 729/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78;, score=0.357 total time= 1.3s [CV 4/5; 733/1000] START bootstrap=False, max depth=7, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=150 [CV 3/5; 729/1000] END bootstrap=True, max depth=16, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=78;, score=0.372 total [CV 5/5; 733/1000] START bootstrap=False, max\_depth=7, max\_features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=150

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[CV 1/5; 733/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.406 total
time=
      1.2s
[CV 1/5; 734/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=96
[CV 2/5; 733/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=150;, score=0.389 total
time=
      1.2s
[CV 2/5; 734/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=96
[CV 3/5; 733/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.363 total
time=
      1.1s
[CV 3/5; 734/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=96
[CV 4/5; 733/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.384 total
time= 1.1s
[CV 4/5; 734/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=96
[CV 1/5; 734/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=96;, score=0.415 total
time= 0.6s
[CV 5/5; 734/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=96
[CV 5/5; 733/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=150;, score=0.388 total
time=
       1.3s
[CV 1/5; 735/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168
[CV 2/5; 734/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=96;, score=0.417 total
time=
      0.7s
[CV 2/5; 735/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=1, min samples split=5, n estimators=168
[CV 3/5; 734/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=96;, score=0.382 total
time=
      0.7s
[CV 3/5; 735/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168
[CV 4/5; 734/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=96;, score=0.413 total
      0.6s
[CV 4/5; 735/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168
[CV 5/5; 734/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=96;, score=0.394 total
time=
       0.7s
```

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[CV 5/5; 735/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168
[CV 1/5; 732/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=140;, score=0.387 total
time= 3.6s
[CV 1/5; 736/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=3, min samples split=7, n estimators=20
[CV 5/5; 732/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=1, min samples split=9, n estimators=140;, score=0.357 total
time=
       3.5s
[CV 2/5; 736/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20
[CV 4/5; 732/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=140;, score=0.329 total
[CV 3/5; 736/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20
[CV 3/5; 732/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=140;, score=0.328 total
time=
      3.6s
[CV 4/5; 736/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=3, min samples split=7, n estimators=20
[CV 2/5; 732/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=140;, score=0.392 total
time= 3.6s
[CV 5/5; 736/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20
[CV 2/5; 735/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168;, score=0.423 total
time=
      1.8s
[CV 1/5; 737/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=36
[CV 1/5; 736/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20;, score=0.380 total
time=
      0.4s
[CV 2/5; 737/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=5, n estimators=36
[CV 2/5; 736/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20;, score=0.362 total
time=
      0.4s
[CV 3/5; 737/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=36
[CV 3/5; 736/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=3, min samples split=7, n estimators=20;, score=0.334 total
time=
       0.4s
[CV 4/5; 737/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=36
```

[CV 4/5; 736/1000] END bootstrap=False, max\_depth=10, max\_features=None,

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min samples leaf=3, min samples split=7, n estimators=20;, score=0.350 total
time=
      0.4s
[CV 5/5; 737/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=36
[CV 5/5; 736/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=20;, score=0.357 total
time= 0.4s
[CV 1/5; 738/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=2, n estimators=158
[CV 1/5; 735/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168;, score=0.396 total
       2.1s
time=
[CV 2/5; 738/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158
[CV 4/5; 735/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168;, score=0.401 total
time=
      1.7s
[CV 3/5; 738/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158
[CV 1/5; 737/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=5, n estimators=36;, score=0.418 total
time= 0.5s
[CV 4/5; 738/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=2, n estimators=158
[CV 2/5; 737/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=5, n estimators=36;, score=0.410 total
time=
      0.5s
[CV 5/5; 738/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158
[CV 4/5; 737/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=5, n estimators=36;, score=0.414 total
      0.4s
[CV 1/5; 739/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 3/5; 737/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=36;, score=0.384 total
time= 0.5s
[CV 2/5; 739/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 3/5; 735/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168;, score=0.397 total
       2.1s
time=
[CV 3/5; 739/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 1/5; 739/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.420 total
time=
      0.1s
```

[CV 4/5; 739/1000] START bootstrap=True, max\_depth=8, max\_features=sqrt,

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min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 5/5; 737/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=5, n estimators=36;, score=0.387 total
      0.6s
[CV 5/5; 739/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20
[CV 2/5; 739/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20;, score=0.401 total
time=
      0.1s
[CV 1/5; 740/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 3/5; 739/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.410 total
time=
       0.1s
[CV 2/5; 740/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 5/5; 735/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=168;, score=0.387 total
time=
      2.1s
[CV 3/5; 740/1000] START bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=194
[CV 4/5; 739/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20;, score=0.410 total
time=
      0.1s
[CV 4/5; 740/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 5/5; 739/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.391 total
[CV 5/5; 740/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194
[CV 3/5; 738/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158;, score=0.395 total
time=
      1.4s
[CV 1/5; 741/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=108
[CV 1/5; 738/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158;, score=0.408 total
time= 1.6s
[CV 2/5; 741/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 2/5; 738/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158;, score=0.410 total
time=
       1.6s
[CV 3/5; 741/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 1/5; 741/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.428 total
```

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time=
        0.4s
[CV 4/5; 741/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 4/5; 738/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=1, min samples split=2, n estimators=158;, score=0.385 total
        1.7s
time=
[CV 5/5; 738/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=158;, score=0.385 total
      1.7s
[CV 5/5; 741/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108
[CV 1/5; 742/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26
[CV 2/5; 741/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.411 total
time=
      0.5s
[CV 2/5; 742/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26
[CV 3/5; 741/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=108;, score=0.389 total
time=
      0.5s
[CV 3/5; 742/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26
[CV 1/5; 742/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26;, score=0.396 total
time=
      0.2s
[CV 4/5; 742/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26
[CV 2/5; 742/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26;, score=0.401 total
time=
      0.2s
[CV 5/5; 742/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26
[CV 3/5; 742/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=26;, score=0.356 total
time= 0.2s
[CV 1/5; 743/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 4/5; 741/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.395 total
time=
      0.5s
[CV 2/5; 743/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 4/5; 742/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26;, score=0.385 total
[CV 3/5; 743/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
```

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[CV 5/5; 741/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=108;, score=0.375 total
time=
      0.5s
[CV 4/5; 743/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38
[CV 5/5; 740/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=194;, score=0.389 total
time=
      1.9s
[CV 5/5; 743/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38
[CV 1/5; 743/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.404 total
time=
      0.2s
[CV 1/5; 744/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52
[CV 5/5; 742/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=26;, score=0.382 total
time= 0.2s
[CV 2/5; 744/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=52
[CV 3/5; 743/1000] END bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.385 total
time= 0.2s
[CV 3/5; 744/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52
[CV 2/5; 743/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.388 total
time=
       0.2s
[CV 4/5; 744/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52
[CV 1/5; 740/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194;, score=0.412 total
time=
      2.1s
[CV 5/5; 744/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=52
[CV 2/5; 740/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=194;, score=0.388 total
time=
       2.1s
[CV 1/5; 745/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94
[CV 5/5; 743/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=38;, score=0.384 total
      0.2s
[CV 2/5; 745/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94
[CV 4/5; 740/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=194;, score=0.392 total
time=
       2.1s
```

```
[CV 3/5; 745/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94
[CV 4/5; 743/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=38;, score=0.406 total
time= 0.2s
[CV 4/5; 745/1000] START bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=94
[CV 3/5; 740/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=194;, score=0.375 total
time=
       2.2s
[CV 5/5; 745/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94
[CV 2/5; 744/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=52;, score=0.406 total
[CV 1/5; 746/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=72
[CV 1/5; 744/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52;, score=0.402 total
time=
      0.6s
[CV 2/5; 746/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=72
[CV 3/5; 744/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52;, score=0.367 total
time= 0.5s
[CV 3/5; 746/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=72
[CV 5/5; 744/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=52;, score=0.376 total
time=
      0.5s
[CV 4/5; 746/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=72
[CV 4/5; 744/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=52;, score=0.382 total
time=
      0.5s
[CV 5/5; 746/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=72
[CV 3/5; 745/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94;, score=0.375 total
time=
      0.7s
[CV 1/5; 747/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 2/5; 745/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=94;, score=0.414 total
time=
       0.7s
[CV 2/5; 747/1000] START bootstrap=True, max depth=19, max features=sqrt,
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[CV 1/5; 745/1000] END bootstrap=True, max depth=14, max features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=194

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min samples leaf=2, min samples split=3, n estimators=94;, score=0.404 total
time=
      0.8s
[CV 3/5; 747/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 4/5; 745/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=94;, score=0.400 total
time= 0.8s
[CV 4/5; 747/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=194
[CV 5/5; 745/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=94;, score=0.400 total
time=
       0.8s
[CV 5/5; 747/1000] START bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194
[CV 1/5; 746/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=72;, score=0.402 total
time=
       0.9s
[CV 1/5; 748/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 4/5; 746/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=72;, score=0.397 total
time= 0.9s
[CV 2/5; 748/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78
[CV 3/5; 746/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=7, n estimators=72;, score=0.382 total
time=
      0.9s
[CV 3/5; 748/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 5/5; 746/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=7, n estimators=72;, score=0.392 total
      0.9s
[CV 4/5; 748/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 2/5; 746/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=72;, score=0.401 total
time= 1.0s
[CV 5/5; 748/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78
[CV 3/5; 748/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78;, score=0.372 total
      1.0s
time=
[CV 1/5; 749/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=132
[CV 2/5; 747/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.407 total
time=
      1.7s
```

[CV 2/5; 749/1000] START bootstrap=False, max\_depth=16, max\_features=None,

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min_samples_leaf=2, min_samples_split=2, n_estimators=132
[CV 5/5; 748/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78;, score=0.376 total
      1.0s
[CV 3/5; 749/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=2, min samples split=2, n estimators=132
[CV 1/5; 747/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.395 total
time=
      1.8s
[CV 4/5; 749/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=132
[CV 2/5; 748/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78;, score=0.370 total
time=
       1.2s
[CV 5/5; 749/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=132
[CV 1/5; 748/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=78;, score=0.402 total
time=
      1.2s
[CV 1/5; 750/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=38
[CV 4/5; 748/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=78;, score=0.360 total
time=
      1.2s
[CV 2/5; 750/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=38
[CV 3/5; 747/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.372 total
[CV 3/5; 750/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=38
[CV 5/5; 747/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.379 total
time=
      1.9s
[CV 4/5; 750/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=38
[CV 4/5; 747/1000] END bootstrap=True, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=194;, score=0.382 total
time=
       2.0s
[CV 5/5; 750/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=38
[CV 1/5; 750/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=38;, score=0.424 total
time=
      0.4s
[CV 1/5; 751/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=104
[CV 2/5; 750/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=38;, score=0.404 total
```

time= 0.4s[CV 2/5; 751/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104 [CV 3/5; 750/1000] END bootstrap=True, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=3, n estimators=38;, score=0.407 total time= 0.4s[CV 3/5; 751/1000] START bootstrap=False, max depth=12, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104 [CV 4/5; 750/1000] END bootstrap=True, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=38;, score=0.401 total time= 0.4s[CV 4/5; 751/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104 [CV 5/5; 750/1000] END bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=38;, score=0.379 total time= 0.3s[CV 5/5; 751/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104 [CV 1/5; 751/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=3, min samples split=6, n estimators=104;, score=0.382 total time= 2.2s [CV 1/5; 752/1000] START bootstrap=False, max depth=11, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18 [CV 2/5; 751/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104;, score=0.373 total time= 2.2s [CV 2/5; 752/1000] START bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18 [CV 1/5; 749/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=132;, score=0.389 total time= 2.9s [CV 3/5; 752/1000] START bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18 [CV 4/5; 751/1000] END bootstrap=False, max\_depth=12, max\_features=None, min samples leaf=3, min samples split=6, n estimators=104;, score=0.378 total time= 2.1s [CV 4/5; 752/1000] START bootstrap=False, max depth=11, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18 [CV 3/5; 751/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104;, score=0.359 total time= 2.2s [CV 5/5; 752/1000] START bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18 [CV 5/5; 751/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=104;, score=0.375 total [CV 1/5; 753/1000] START bootstrap=True, max\_depth=14, max\_features=sqrt,

min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=80

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[CV 4/5; 749/1000] END bootstrap=False, max_depth=16, max_features=None, min_samples_leaf=2, min_samples_split=2, n_estimators=132;, score=0.338 total time= 3.1s
```

- [CV 1/5; 752/1000] END bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18;, score=0.395 total time= 0.4s
- [CV 2/5; 753/1000] START bootstrap=True, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=80
- [CV 3/5; 753/1000] START bootstrap=True, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=80
- [CV 2/5; 752/1000] END bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18;, score=0.363 total time= 0.4s
- [CV 4/5; 753/1000] START bootstrap=True, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=80
- [CV 4/5; 752/1000] END bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18;, score=0.366 total time= 0.4s
- [CV 5/5; 753/1000] START bootstrap=True, max\_depth=14, max\_features=sqrt, min samples leaf=3, min samples split=3, n estimators=80
- [CV 5/5; 752/1000] END bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18;, score=0.385 total time= 0.4s
- [CV 1/5; 754/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10
- [CV 3/5; 752/1000] END bootstrap=False, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=18;, score=0.354 total time= 0.4s
- [CV 2/5; 754/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10
- [CV 1/5; 754/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10;, score=0.395 total time= 0.2s
- [CV 3/5; 754/1000] START bootstrap=True, max\_depth=16, max\_features=None, min samples leaf=2, min samples split=4, n estimators=10
- [CV 2/5; 754/1000] END bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10;, score=0.401 total time= 0.2s
- [CV 4/5; 754/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10
- [CV 5/5; 749/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=132;, score=0.351 total time= 3.4s
- [CV 2/5; 749/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=132;, score=0.375 total time= 3.5s
- [CV 5/5; 754/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=10

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[CV 1/5; 755/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 4/5; 754/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=10;, score=0.376 total
time= 0.1s
[CV 2/5; 755/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=2, min samples split=8, n estimators=196
[CV 3/5; 754/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=4, n estimators=10;, score=0.391 total
time=
      0.2s
[CV 3/5; 755/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 3/5; 749/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=132;, score=0.332 total
[CV 4/5; 755/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196
[CV 5/5; 754/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=10;, score=0.360 total
time=
      0.2s
[CV 5/5; 755/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=2, min samples split=8, n estimators=196
[CV 3/5; 753/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=80;, score=0.394 total
time= 0.6s
[CV 1/5; 756/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=10
[CV 1/5; 753/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=80;, score=0.404 total
time=
      0.7s
[CV 2/5; 756/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=10
[CV 2/5; 753/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=80;, score=0.404 total
time=
      0.7s
[CV 3/5; 756/1000] START bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=10
[CV 4/5; 753/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=80;, score=0.397 total
time=
      0.6s
[CV 4/5; 756/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=10
[CV 1/5; 756/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=10;, score=0.399 total
time=
       0.2s
[CV 5/5; 756/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=10
```

[CV 2/5; 756/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt,

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min_samples_leaf=3, min_samples_split=9, n_estimators=10;, score=0.372 total time= 0.1s
[CV 1/5; 757/1000] START bootstrap=False, max_depth=None, max_features=None, min_samples_leaf=3, min_samples_split=3, n_estimators=144
```

- [CV 5/5; 753/1000] END bootstrap=True, max\_depth=14, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=80;, score=0.376 total time= 0.7s
- [CV 2/5; 757/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=144
- [CV 4/5; 756/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=10;, score=0.356 total time= 0.2s
- [CV 3/5; 757/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples leaf=3, min\_samples split=3, n\_estimators=144
- [CV 5/5; 756/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=10;, score=0.385 total time= 0.2s
- [CV 3/5; 756/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=10;, score=0.350 total time= 0.2s
- [CV 4/5; 757/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=144
- [CV 5/5; 757/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=144
- [CV 1/5; 755/1000] END bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=196;, score=0.414 total time= 2.6s
- [CV 1/5; 758/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=26
- [CV 1/5; 758/1000] END bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=26;, score=0.396 total time= 0.3s
- [CV 2/5; 758/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=26
- [CV 5/5; 755/1000] END bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=196;, score=0.382 total time= 3.0s
- [CV 3/5; 758/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=26
- [CV 4/5; 755/1000] END bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=196;, score=0.397 total time= 3.0s
- [CV 4/5; 758/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=26
- [CV 2/5; 755/1000] END bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=196;, score=0.420 total time= 3.1s
- [CV 5/5; 758/1000] START bootstrap=False, max\_depth=19, max\_features=sqrt,

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min_samples_leaf=2, min_samples_split=2, n_estimators=26
[CV 2/5; 758/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.385 total
time= 0.3s
[CV 1/5; 759/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=98
[CV 3/5; 755/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=196;, score=0.369 total
time=
      3.3s
[CV 2/5; 759/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98
[CV 3/5; 758/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.350 total
time=
       0.4s
[CV 3/5; 759/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98
[CV 4/5; 758/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.354 total
time=
      0.4s
[CV 4/5; 759/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=98
[CV 5/5; 758/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=26;, score=0.370 total
time=
      0.4s
[CV 5/5; 759/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98
[CV 4/5; 757/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=144;, score=0.351 total
[CV 1/5; 760/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 1/5; 760/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=50;, score=0.417 total
time=
      0.2s
[CV 2/5; 760/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=50
[CV 2/5; 760/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50;, score=0.411 total
time= 0.2s
[CV 3/5; 760/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 3/5; 760/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=50;, score=0.382 total
time=
      0.2s
[CV 4/5; 760/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 1/5; 759/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=98;, score=0.404 total
```

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time=
        1.4s
[CV 5/5; 760/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50
[CV 4/5; 760/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=50;, score=0.376 total
time=
       0.2s
[CV 1/5; 761/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186
[CV 2/5; 759/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98;, score=0.388 total
time=
      1.4s
[CV 2/5; 761/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186
[CV 5/5; 757/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=144;, score=0.350 total
time= 4.4s
[CV 3/5; 761/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186
[CV 2/5; 757/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=3, n estimators=144;, score=0.348 total
time=
      4.5s
[CV 4/5; 761/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186
[CV 5/5; 760/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=50;, score=0.413 total
time=
       0.2s
[CV 5/5; 761/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186
[CV 3/5; 759/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98;, score=0.343 total
time=
       1.4s
[CV 1/5; 762/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 4/5; 759/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=98;, score=0.367 total
time=
      1.4s
[CV 2/5; 762/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 3/5; 757/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=144;, score=0.353 total
time=
      4.5s
[CV 3/5; 762/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
[CV 5/5; 759/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=98;, score=0.351 total
[CV 4/5; 762/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20
```

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[CV 1/5; 762/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=20;, score=0.392 total
time=
      0.1s
[CV 5/5; 762/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20
[CV 2/5; 762/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.401 total
time= 0.1s
[CV 1/5; 763/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 3/5; 762/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.401 total
time=
      0.1s
[CV 2/5; 763/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 1/5; 757/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=144;, score=0.336 total
      4.8s
[CV 3/5; 763/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=190
[CV 4/5; 762/1000] END bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.403 total
time= 0.1s
[CV 4/5; 763/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 5/5; 762/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=20;, score=0.406 total
time=
       0.1s
[CV 5/5; 763/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 4/5; 763/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.394 total
time=
      1.4s
[CV 1/5; 764/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=30
[CV 3/5; 763/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=190;, score=0.373 total
time=
      1.5s
[CV 2/5; 764/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=30
[CV 1/5; 764/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=30;, score=0.414 total
      0.1s
[CV 3/5; 764/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=30
[CV 1/5; 763/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.392 total
time=
       1.7s
```

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[CV 4/5; 764/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=30
[CV 2/5; 764/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=30;, score=0.406 total
time= 0.1s
[CV 5/5; 764/1000] START bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=30
[CV 3/5; 764/1000] END bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=30;, score=0.411 total
time=
      0.1s
[CV 1/5; 765/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68
[CV 2/5; 763/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.413 total
[CV 2/5; 765/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68
[CV 5/5; 763/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.384 total
time=
      1.6s
[CV 3/5; 765/1000] START bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=68
[CV 4/5; 764/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=30;, score=0.387 total
time= 0.1s
[CV 5/5; 764/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=30;, score=0.411 total
time=
       0.1s
[CV 4/5; 765/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68
[CV 5/5; 765/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68
[CV 2/5; 765/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68;, score=0.392 total
time=
      0.5s
[CV 1/5; 766/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=134
[CV 3/5; 765/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68;, score=0.359 total
time=
      0.5s
[CV 2/5; 766/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 1/5; 765/1000] END bootstrap=False, max depth=7, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=68;, score=0.409 total
time=
       0.6s
[CV 4/5; 765/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68;, score=0.378 total
time=
       0.5s
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[CV 3/5; 766/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 4/5; 766/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134
[CV 5/5; 765/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=68;, score=0.417 total
time= 0.6s
[CV 5/5; 766/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=3, min samples split=4, n estimators=134
[CV 2/5; 761/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186;, score=0.367 total
       2.9s
time=
[CV 1/5; 767/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=78
[CV 4/5; 761/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186;, score=0.359 total
time=
       2.8s
[CV 2/5; 767/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 1/5; 761/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=186;, score=0.379 total
time=
       3.0s
[CV 3/5; 767/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 3/5; 761/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186;, score=0.360 total
time=
      3.0s
[CV 4/5; 767/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 5/5; 761/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=186;, score=0.366 total
[CV 5/5; 767/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=78
[CV 4/5; 766/1000] END bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.407 total
time= 0.8s
[CV 1/5; 768/1000] START bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 1/5; 766/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.418 total
       0.8s
time=
[CV 2/5; 768/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=148
[CV 2/5; 766/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=134;, score=0.403 total
time=
       0.8s
[CV 3/5; 768/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
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min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=148 [CV 3/5; 766/1000] END bootstrap=True, max\_depth=9, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=134;, score=0.400 total 0.8s [CV 4/5; 768/1000] START bootstrap=False, max depth=None, max features=sqrt, min samples leaf=2, min samples split=8, n estimators=148 [CV 5/5; 766/1000] END bootstrap=True, max depth=9, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=134;, score=0.408 total time= 0.8s [CV 5/5; 768/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=148 [CV 1/5; 767/1000] END bootstrap=False, max\_depth=12, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=78;, score=0.401 total time= 0.9s [CV 1/5; 769/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104 [CV 2/5; 767/1000] END bootstrap=False, max\_depth=12, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=78;, score=0.372 total time= 0.9s [CV 2/5; 769/1000] START bootstrap=False, max depth=6, max features=None, min samples leaf=2, min samples split=5, n estimators=104 [CV 3/5; 767/1000] END bootstrap=False, max depth=12, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=78;, score=0.375 total time= 0.9s [CV 3/5; 769/1000] START bootstrap=False, max\_depth=6, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104 [CV 4/5; 767/1000] END bootstrap=False, max\_depth=12, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=78;, score=0.385 total [CV 4/5; 769/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104 [CV 5/5; 767/1000] END bootstrap=False, max\_depth=12, max\_features=sqrt, min samples leaf=1, min samples split=6, n estimators=78;, score=0.369 total time= 1.0s [CV 5/5; 769/1000] START bootstrap=False, max\_depth=6, max\_features=None, min samples leaf=2, min samples split=5, n estimators=104 [CV 2/5; 769/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104;, score=0.387 total time= 1.1s[CV 1/5; 770/1000] START bootstrap=True, max\_depth=12, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90 [CV 1/5; 769/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104;, score=0.395 total time= 1.2s [CV 2/5; 770/1000] START bootstrap=True, max depth=12, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90 [CV 3/5; 769/1000] END bootstrap=False, max\_depth=6, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104;, score=0.334 total time= 1.3s [CV 3/5; 770/1000] START bootstrap=True, max\_depth=12, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90 [CV 4/5; 769/1000] END bootstrap=False, max\_depth=6, max\_features=None, min samples leaf=2, min samples split=5, n estimators=104;, score=0.373 total time= 1.3s [CV 4/5; 770/1000] START bootstrap=True, max depth=12, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90 [CV 5/5; 769/1000] END bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=104;, score=0.391 total time= 1.3s [CV 5/5; 770/1000] START bootstrap=True, max depth=12, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90 [CV 1/5; 770/1000] END bootstrap=True, max depth=12, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90;, score=0.409 total time= 0.6s[CV 1/5; 771/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=192 [CV 2/5; 770/1000] END bootstrap=True, max\_depth=12, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=90;, score=0.417 total time= 0.7s [CV 2/5; 771/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=192 [CV 3/5; 770/1000] END bootstrap=True, max\_depth=12, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=90;, score=0.379 total time= 0.7s [CV 3/5; 771/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=192 [CV 2/5; 768/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=148;, score=0.395 total time= 2.5s [CV 4/5; 771/1000] START bootstrap=True, max\_depth=14, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=192 [CV 4/5; 770/1000] END bootstrap=True, max\_depth=12, max\_features=sqrt, min samples leaf=2, min samples split=7, n estimators=90;, score=0.394 total time= 0.7s[CV 5/5; 771/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=192 [CV 4/5; 768/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=148;, score=0.366 total time= 2.6s [CV 1/5; 772/1000] START bootstrap=False, max depth=6, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=142 [CV 3/5; 768/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=148;, score=0.356 total [CV 2/5; 772/1000] START bootstrap=False, max\_depth=6, max\_features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=142

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[CV 5/5; 768/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.373 total
time=
       2.6s
[CV 3/5; 772/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=142
[CV 5/5; 770/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=90;, score=0.394 total
time=
      0.7s
[CV 4/5; 772/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142
[CV 1/5; 768/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=148;, score=0.371 total
time=
       2.8s
[CV 5/5; 772/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142
[CV 4/5; 772/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.384 total
      0.8s
[CV 1/5; 773/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96
[CV 5/5; 772/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=142;, score=0.417 total
time= 0.8s
[CV 2/5; 773/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=96
[CV 1/5; 772/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.409 total
time=
       1.0s
[CV 3/5; 773/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=96
[CV 2/5; 772/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.398 total
time=
      1.0s
[CV 4/5; 773/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96
[CV 3/5; 772/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=142;, score=0.360 total
time=
      1.0s
[CV 5/5; 773/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=96
[CV 2/5; 773/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96;, score=0.414 total
      0.8s
[CV 1/5; 774/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 1/5; 773/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96;, score=0.418 total
time=
       0.9s
```

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[CV 2/5; 774/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 3/5; 773/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=96;, score=0.392 total
time= 0.9s
[CV 3/5; 774/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=3, n estimators=64
[CV 4/5; 773/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96;, score=0.384 total
time=
      0.9s
[CV 4/5; 774/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 5/5; 773/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=96;, score=0.375 total
[CV 5/5; 774/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 2/5; 771/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=192;, score=0.407 total
time=
       2.8s
[CV 1/5; 775/1000] START bootstrap=False, max depth=20, max features=None,
min samples leaf=3, min samples split=6, n estimators=6
[CV 1/5; 771/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=4, n estimators=192;, score=0.399 total
time= 3.0s
[CV 2/5; 775/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 1/5; 775/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.361 total
time=
      0.1s
[CV 3/5; 775/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 3/5; 774/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.373 total
time=
      0.8s
[CV 4/5; 775/1000] START bootstrap=False, max depth=20, max features=None,
min samples leaf=3, min samples split=6, n estimators=6
[CV 1/5; 774/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.409 total
time=
      0.9s
[CV 5/5; 775/1000] START bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6
[CV 3/5; 771/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=192;, score=0.369 total
time=
        2.9s
[CV 1/5; 776/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36
```

[CV 4/5; 771/1000] END bootstrap=True, max depth=14, max features=None,

```
min_samples_leaf=1, min_samples_split=4, n_estimators=192;, score=0.382 total
time=
       2.9s
[CV 2/5; 776/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36
[CV 5/5; 771/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=192;, score=0.379 total
time= 2.9s
[CV 2/5; 775/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.366 total
time=
      0.2s
[CV 3/5; 776/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36
[CV 4/5; 776/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36
[CV 3/5; 775/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.335 total
time=
       0.2s
[CV 5/5; 776/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36
[CV 4/5; 775/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.331 total
time= 0.2s
[CV 1/5; 777/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168
[CV 5/5; 775/1000] END bootstrap=False, max_depth=20, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=6;, score=0.356 total
time=
      0.2s
[CV 2/5; 777/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168
[CV 2/5; 774/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=3, n estimators=64;, score=0.408 total
      1.0s
[CV 3/5; 777/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168
[CV 4/5; 774/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.372 total
time= 1.0s
[CV 4/5; 777/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168
[CV 5/5; 774/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.384 total
time=
      1.0s
[CV 5/5; 777/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168
```

[CV 1/5; 778/1000] START bootstrap=False, max\_depth=8, max\_features=None,

[CV 1/5; 776/1000] END bootstrap=False, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=36;, score=0.418 total

time=

0.5s

```
min_samples_leaf=2, min_samples_split=4, n_estimators=2
[CV 2/5; 776/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=36;, score=0.408 total
      0.5s
[CV 2/5; 778/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=4, n estimators=2
[CV 1/5; 778/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2;, score=0.379 total
time=
      0.0s
[CV 3/5; 778/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2
[CV 2/5; 778/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2;, score=0.372 total
time=
       0.0s
[CV 4/5; 778/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2
[CV 3/5; 776/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=36;, score=0.353 total
time=
      0.5s
[CV 5/5; 778/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=4, n estimators=2
[CV 3/5; 778/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2;, score=0.350 total
time=
      0.0s
[CV 1/5; 779/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 4/5; 776/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=36;, score=0.357 total
[CV 4/5; 778/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2;, score=0.357 total
      0.0s
[CV 2/5; 779/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 3/5; 779/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=8, n estimators=84
[CV 5/5; 776/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=36;, score=0.382 total
time= 0.5s
[CV 4/5; 779/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 5/5; 778/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=2;, score=0.367 total
time=
      0.0s
[CV 5/5; 779/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84
[CV 2/5; 779/1000] END bootstrap=True, max_depth=12, max_features=None,
```

min samples leaf=3, min samples split=8, n estimators=84;, score=0.391 total

```
time=
        0.9s
[CV 1/5; 780/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44
[CV 5/5; 779/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.384 total
time=
       0.9s
[CV 2/5; 780/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44
[CV 4/5; 779/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84;, score=0.391 total
time=
      1.1s
[CV 3/5; 780/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44
[CV 1/5; 779/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=84;, score=0.402 total
time=
      1.1s
[CV 4/5; 780/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44
[CV 3/5; 779/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=8, n estimators=84;, score=0.395 total
time=
      1.1s
[CV 5/5; 780/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44
[CV 1/5; 780/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44;, score=0.395 total
time=
       0.3s
[CV 1/5; 781/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40
[CV 2/5; 780/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44;, score=0.422 total
time=
       0.3s
[CV 2/5; 781/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40
[CV 1/5; 781/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=40;, score=0.423 total
time= 0.2s
[CV 3/5; 781/1000] START bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40
[CV 2/5; 781/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40;, score=0.400 total
time=
      0.2s
[CV 4/5; 781/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40
[CV 4/5; 780/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44;, score=0.384 total
[CV 5/5; 781/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40
```

```
[CV 3/5; 780/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=44;, score=0.384 total
time=
      0.4s
[CV 1/5; 782/1000] START bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=6, n estimators=46
[CV 5/5; 780/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=44;, score=0.417 total
time= 0.4s
[CV 2/5; 782/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=46
[CV 3/5; 781/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=7, n estimators=40;, score=0.376 total
time=
      0.1s
[CV 3/5; 782/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=46
[CV 5/5; 781/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=7, n_estimators=40;, score=0.411 total
time= 0.2s
[CV 4/5; 781/1000] END bootstrap=True, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=7, n estimators=40;, score=0.365 total
time= 0.2s
[CV 4/5; 782/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=46
[CV 5/5; 782/1000] START bootstrap=False, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=46
[CV 3/5; 782/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=6, n estimators=46;, score=0.334 total
time=
      0.5s
[CV 1/5; 783/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32
[CV 1/5; 782/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=46;, score=0.395 total
time=
      0.6s
[CV 2/5; 783/1000] START bootstrap=True, max_depth=10, max_features=None,
min samples leaf=3, min samples split=7, n estimators=32
[CV 2/5; 782/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=6, n estimators=46;, score=0.387 total
time=
      0.6s
[CV 3/5; 783/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32
[CV 4/5; 782/1000] END bootstrap=False, max_depth=6, max_features=None,
min samples leaf=2, min samples split=6, n estimators=46;, score=0.373 total
[CV 4/5; 783/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32
[CV 5/5; 782/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=6, n estimators=46;, score=0.391 total
```

time=

0.6s

```
[CV 5/5; 783/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32
[CV 3/5; 783/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32;, score=0.394 total
time= 0.4s
[CV 1/5; 784/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=2, min samples split=8, n estimators=166
[CV 2/5; 783/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=3, min samples split=7, n estimators=32;, score=0.408 total
time=
      0.4s
[CV 2/5; 784/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166
[CV 1/5; 783/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=7, n estimators=32;, score=0.418 total
[CV 3/5; 784/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166
[CV 5/5; 783/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32;, score=0.395 total
time=
      0.3s
[CV 4/5; 784/1000] START bootstrap=False, max depth=None, max features=None,
min samples leaf=2, min samples split=8, n estimators=166
[CV 4/5; 783/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=32;, score=0.411 total
time= 0.4s
[CV 5/5; 784/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166
[CV 4/5; 777/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168;, score=0.338 total
time= 4.1s
[CV 1/5; 785/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=90
[CV 5/5; 777/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168;, score=0.351 total
time=
      4.3s
[CV 2/5; 785/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=90
[CV 3/5; 777/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168;, score=0.332 total
time=
      4.4s
[CV 3/5; 785/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=90
[CV 2/5; 777/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=168;, score=0.375 total
time=
       4.5s
[CV 4/5; 785/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
```

[CV 1/5; 777/1000] END bootstrap=False, max\_depth=16, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=90

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min_samples_leaf=2, min_samples_split=4, n_estimators=168;, score=0.387 total
time=
      4.6s
[CV 5/5; 785/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=90
[CV 1/5; 785/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=90;, score=0.404 total
time= 1.1s
[CV 1/5; 786/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=120
[CV 2/5; 785/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=90;, score=0.382 total
       1.0s
time=
[CV 2/5; 786/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 5/5; 785/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=90;, score=0.376 total
time=
       0.9s
[CV 3/5; 786/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 4/5; 785/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=90;, score=0.387 total
time= 1.0s
[CV 4/5; 786/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 3/5; 785/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=90;, score=0.357 total
time=
      1.0s
[CV 5/5; 786/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120
[CV 1/5; 786/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120;, score=0.393 total
      0.9s
[CV 1/5; 787/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=50
[CV 3/5; 786/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120;, score=0.375 total
time= 0.8s
[CV 2/5; 787/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=50
[CV 2/5; 786/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120;, score=0.414 total
      0.9s
time=
[CV 3/5; 787/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=50
[CV 4/5; 786/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=120;, score=0.408 total
time=
       0.8s
[CV 4/5; 787/1000] START bootstrap=True, max_depth=8, max_features=None,
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min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=50 [CV 5/5; 786/1000] END bootstrap=True, max depth=11, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=120;, score=0.394 total 0.9s [CV 5/5; 787/1000] START bootstrap=True, max depth=8, max features=None, min samples leaf=2, min samples split=9, n estimators=50 [CV 1/5; 787/1000] END bootstrap=True, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=50;, score=0.420 total time= 0.5s[CV 1/5; 788/1000] START bootstrap=True, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=34 [CV 2/5; 787/1000] END bootstrap=True, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=9, n estimators=50;, score=0.395 total time= 0.5s[CV 2/5; 788/1000] START bootstrap=True, max depth=17, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=34 [CV 3/5; 787/1000] END bootstrap=True, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=9, n estimators=50;, score=0.406 total time= 0.5s [CV 3/5; 788/1000] START bootstrap=True, max depth=17, max features=sqrt, min samples leaf=3, min samples split=5, n estimators=34 [CV 4/5; 787/1000] END bootstrap=True, max depth=8, max features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=50;, score=0.397 total time= 0.5s [CV 4/5; 788/1000] START bootstrap=True, max\_depth=17, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=34 [CV 1/5; 788/1000] END bootstrap=True, max depth=17, max features=sqrt, min samples leaf=3, min samples split=5, n estimators=34;, score=0.398 total [CV 5/5; 788/1000] START bootstrap=True, max depth=17, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=34 [CV 5/5; 787/1000] END bootstrap=True, max\_depth=8, max\_features=None, min samples leaf=2, min samples split=9, n estimators=50;, score=0.375 total time= 0.6s [CV 1/5; 789/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=98 [CV 2/5; 788/1000] END bootstrap=True, max depth=17, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=34;, score=0.397 total time= 0.3s[CV 2/5; 789/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=98 [CV 3/5; 788/1000] END bootstrap=True, max depth=17, max features=sqrt, min samples leaf=3, min samples split=5, n estimators=34;, score=0.411 total time= 0.3s[CV 3/5; 789/1000] START bootstrap=False, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=98 [CV 4/5; 788/1000] END bootstrap=True, max\_depth=17, max\_features=sqrt, min samples leaf=3, min samples split=5, n estimators=34;, score=0.381 total

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time=
        0.3s
[CV 4/5; 789/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=98
[CV 5/5; 788/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=34;, score=0.359 total
       0.3s
time=
[CV 5/5; 789/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=98
[CV 4/5; 784/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166;, score=0.348 total
time=
      4.3s
[CV 1/5; 790/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 5/5; 784/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166;, score=0.328 total
time=
      5.1s
[CV 2/5; 790/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 2/5; 789/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=98;, score=0.378 total
time=
      1.1s
[CV 3/5; 790/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 1/5; 784/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166;, score=0.345 total
time=
       5.3s
[CV 4/5; 790/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 3/5; 784/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=166;, score=0.335 total
time=
       5.3s
[CV 5/5; 790/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98
[CV 2/5; 784/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=8, n estimators=166;, score=0.319 total
      5.4s
time=
[CV 1/5; 791/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 1/5; 789/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=98;, score=0.412 total
time=
      1.4s
[CV 2/5; 791/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 4/5; 789/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=98;, score=0.373 total
[CV 3/5; 791/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
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min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=46

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[CV 3/5; 789/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=98;, score=0.347 total
time=
      1.4s
[CV 4/5; 791/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=46
[CV 1/5; 791/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.408 total
time= 0.3s
[CV 5/5; 791/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=46
[CV 5/5; 789/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=98;, score=0.375 total
time=
      1.4s
[CV 1/5; 792/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 1/5; 790/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98;, score=0.371 total
time= 1.4s
[CV 2/5; 792/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=56
[CV 2/5; 791/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.398 total
time= 0.3s
[CV 3/5; 792/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 3/5; 791/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.365 total
time=
       0.3s
[CV 4/5; 792/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56
[CV 4/5; 791/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=46;, score=0.373 total
time=
      0.3s
[CV 5/5; 792/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=4, n estimators=56
[CV 5/5; 791/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=46;, score=0.416 total
time=
      0.3s
[CV 1/5; 793/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=88
[CV 3/5; 790/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.353 total
[CV 2/5; 793/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=88
[CV 5/5; 790/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.366 total
```

time=

1.3s

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[CV 3/5; 793/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=88
[CV 2/5; 790/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=98;, score=0.370 total
time= 1.5s
[CV 4/5; 793/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=88
[CV 1/5; 793/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=88;, score=0.406 total
time=
      0.8s
[CV 5/5; 793/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=88
[CV 4/5; 790/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=5, n estimators=98;, score=0.351 total
[CV 1/5; 794/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 1/5; 792/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.389 total
time=
      1.2s
[CV 2/5; 794/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98
[CV 2/5; 792/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=4, n estimators=56;, score=0.373 total
time= 1.2s
[CV 3/5; 794/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 4/5; 792/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=56;, score=0.381 total
time=
      1.2s
[CV 4/5; 794/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98
[CV 5/5; 792/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.363 total
time=
      1.2s
[CV 5/5; 794/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98
[CV 3/5; 792/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=56;, score=0.362 total
time=
      1.3s
[CV 1/5; 795/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18
[CV 1/5; 795/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=18;, score=0.393 total
time=
       0.3s
[CV 2/5; 795/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18
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[CV 2/5; 793/1000] END bootstrap=True, max depth=20, max features=sqrt,

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min samples leaf=3, min samples split=6, n estimators=88;, score=0.404 total
time=
      0.8s
[CV 3/5; 795/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18
[CV 2/5; 794/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=98;, score=0.397 total
time= 0.6s
[CV 4/5; 795/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=18
[CV 1/5; 794/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.411 total
       0.7s
time=
[CV 5/5; 795/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=18
[CV 4/5; 793/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=88;, score=0.375 total
time=
       0.8s
[CV 1/5; 796/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198
[CV 3/5; 794/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.350 total
time= 0.6s
[CV 2/5; 796/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198
[CV 4/5; 794/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.379 total
time=
      0.6s
[CV 3/5; 796/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198
[CV 2/5; 795/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18;, score=0.382 total
      0.3s
[CV 4/5; 796/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198
[CV 3/5; 795/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18;, score=0.348 total
time= 0.2s
[CV 5/5; 796/1000] START bootstrap=False, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198
[CV 3/5; 793/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=88;, score=0.370 total
      0.9s
time=
[CV 5/5; 794/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=98;, score=0.404 total
time=
       0.6s
[CV 1/5; 797/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8
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[CV 2/5; 797/1000] START bootstrap=True, max depth=14, max features=None,

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min_samples_leaf=3, min_samples_split=4, n_estimators=8
[CV 5/5; 793/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=88;, score=0.367 total
      0.9s
[CV 3/5; 797/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=3, min samples split=4, n estimators=8
[CV 4/5; 795/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=18;, score=0.384 total
time=
      0.3s
[CV 4/5; 797/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8
[CV 2/5; 797/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8;, score=0.397 total
time=
       0.1s
[CV 5/5; 797/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8
[CV 1/5; 797/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8;, score=0.383 total
time=
      0.1s
[CV 1/5; 798/1000] START bootstrap=False, max depth=None, max features=sqrt,
min samples leaf=3, min samples split=6, n estimators=126
[CV 3/5; 797/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8;, score=0.406 total
time=
      0.1s
[CV 5/5; 795/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=18;, score=0.376 total
time=
      0.3s
[CV 2/5; 798/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126
[CV 3/5; 798/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126
[CV 4/5; 797/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8;, score=0.370 total
time=
      0.1s
[CV 4/5; 798/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126
[CV 5/5; 797/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=8;, score=0.395 total
time= 0.1s
[CV 5/5; 798/1000] START bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126
[CV 1/5; 798/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126;, score=0.371 total
time=
      1.9s
[CV 1/5; 799/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158
[CV 5/5; 796/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198;, score=0.365 total
```

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time=
        2.2s
[CV 2/5; 799/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158
[CV 2/5; 798/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=126;, score=0.384 total
        2.1s
time=
[CV 3/5; 799/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158
[CV 5/5; 798/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126;, score=0.376 total
time=
       2.1s
[CV 4/5; 799/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158
[CV 4/5; 798/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min_samples_leaf=3, min_samples_split=6, n_estimators=126;, score=0.359 total
time=
      2.1s
[CV 5/5; 799/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158
[CV 3/5; 798/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=6, n estimators=126;, score=0.373 total
time=
       2.2s
[CV 1/5; 800/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 2/5; 796/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198;, score=0.388 total
time=
       2.6s
[CV 2/5; 800/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 4/5; 796/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198;, score=0.381 total
time=
       2.6s
[CV 3/5; 800/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 3/5; 796/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=198;, score=0.346 total
       2.7s
time=
[CV 4/5; 800/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 1/5; 796/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=198;, score=0.396 total
time=
       2.7s
[CV 5/5; 800/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130
[CV 1/5; 800/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.374 total
[CV 1/5; 801/1000] START bootstrap=True, max_depth=11, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=188

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[CV 2/5; 800/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.422 total
time=
       2.3s
[CV 2/5; 801/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=5, n estimators=188
[CV 4/5; 800/1000] END bootstrap=True, max depth=None, max features=None,
min samples leaf=1, min samples split=9, n estimators=130;, score=0.369 total
time=
       2.3s
[CV 3/5; 801/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188
[CV 5/5; 800/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.373 total
time=
       2.3s
[CV 4/5; 801/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188
[CV 3/5; 800/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=130;, score=0.387 total
       2.5s
[CV 5/5; 801/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=5, n estimators=188
[CV 1/5; 799/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=2, n estimators=158;, score=0.380 total
time=
      3.3s
[CV 1/5; 802/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138
[CV 2/5; 799/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158;, score=0.387 total
time=
       3.4s
[CV 2/5; 802/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138
[CV 4/5; 799/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158;, score=0.331 total
time=
      3.8s
[CV 3/5; 802/1000] START bootstrap=True, max depth=20, max features=None,
min samples leaf=2, min samples split=8, n estimators=138
[CV 3/5; 799/1000] END bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=2, n estimators=158;, score=0.334 total
time=
      4.0s
[CV 4/5; 802/1000] START bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138
[CV 5/5; 799/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=158;, score=0.363 total
[CV 5/5; 802/1000] START bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138
[CV 4/5; 801/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.406 total
time=
       2.2s
```

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[CV 1/5; 803/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 1/5; 801/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.396 total
time= 2.4s
[CV 2/5; 803/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=4, n estimators=92
[CV 2/5; 801/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=5, n estimators=188;, score=0.417 total
time=
       2.4s
[CV 3/5; 803/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 3/5; 801/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.381 total
[CV 4/5; 803/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 1/5; 802/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138;, score=0.383 total
time=
       2.1s
[CV 5/5; 803/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=4, n estimators=92
[CV 5/5; 801/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=188;, score=0.395 total
time=
       2.4s
[CV 1/5; 804/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138
[CV 2/5; 802/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138;, score=0.401 total
time=
       2.3s
[CV 2/5; 804/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138
[CV 2/5; 803/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.400 total
time=
      1.2s
[CV 3/5; 804/1000] START bootstrap=True, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=138
[CV 1/5; 803/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.399 total
time=
      1.3s
[CV 4/5; 804/1000] START bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138
[CV 3/5; 802/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138;, score=0.367 total
time=
        2.4s
[CV 5/5; 804/1000] START bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138
[CV 3/5; 803/1000] END bootstrap=True, max depth=12, max features=None,
```

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min samples leaf=1, min samples split=4, n estimators=92;, score=0.387 total
time=
      1.2s
[CV 1/5; 805/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180
[CV 5/5; 802/1000] END bootstrap=True, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138;, score=0.367 total
time= 2.3s
[CV 2/5; 805/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=5, n estimators=180
[CV 4/5; 802/1000] END bootstrap=True, max_depth=20, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=138;, score=0.373 total
       2.4s
time=
[CV 3/5; 805/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180
[CV 4/5; 803/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=4, n estimators=92;, score=0.397 total
time=
      1.3s
[CV 4/5; 805/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180
[CV 5/5; 803/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.379 total
time= 1.3s
[CV 5/5; 805/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=5, n estimators=180
[CV 1/5; 804/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138;, score=0.390 total
time=
      1.3s
[CV 1/5; 806/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 2/5; 804/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138;, score=0.413 total
      1.2s
[CV 2/5; 806/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 3/5; 804/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138;, score=0.379 total
time= 1.2s
[CV 3/5; 806/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 4/5; 804/1000] END bootstrap=True, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138;, score=0.385 total
      1.1s
time=
[CV 4/5; 806/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 5/5; 804/1000] END bootstrap=True, max depth=15, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=138;, score=0.385 total
time=
      1.2s
[CV 5/5; 806/1000] START bootstrap=True, max depth=19, max features=None,
```

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min_samples_leaf=2, min_samples_split=2, n_estimators=102
[CV 1/5; 806/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.386 total
      1.7s
[CV 1/5; 807/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=3, n estimators=176
[CV 2/5; 806/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.397 total
time=
      1.8s
[CV 2/5; 807/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176
[CV 4/5; 806/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.384 total
time=
       1.4s
[CV 3/5; 807/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176
[CV 3/5; 806/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.385 total
time=
      1.8s
[CV 4/5; 807/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=3, n estimators=176
[CV 5/5; 805/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180;, score=0.378 total
time=
       2.7s
[CV 5/5; 807/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176
[CV 5/5; 806/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=102;, score=0.370 total
[CV 1/5; 808/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148
[CV 1/5; 805/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180;, score=0.401 total
time=
       3.0s
[CV 2/5; 808/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=148
[CV 2/5; 805/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180;, score=0.410 total
time= 3.0s
[CV 3/5; 808/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148
[CV 4/5; 805/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180;, score=0.369 total
time=
       3.0s
[CV 4/5; 808/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148
[CV 3/5; 805/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=180;, score=0.372 total
```

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time=
        3.1s
[CV 5/5; 808/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148
[CV 1/5; 807/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=3, n estimators=176;, score=0.406 total
time=
        1.9s
[CV 1/5; 809/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22
[CV 3/5; 807/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176;, score=0.388 total
time=
      1.6s
[CV 2/5; 809/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22
[CV 1/5; 809/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22;, score=0.405 total
time=
      0.2s
[CV 3/5; 809/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22
[CV 2/5; 807/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=3, min samples split=3, n estimators=176;, score=0.413 total
time=
      1.8s
[CV 4/5; 809/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22
[CV 1/5; 808/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.389 total
time=
       1.3s
[CV 5/5; 809/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=22
[CV 2/5; 808/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.417 total
time=
      1.3s
[CV 1/5; 810/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 2/5; 809/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=3, n estimators=22;, score=0.387 total
time= 0.2s
[CV 2/5; 810/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 3/5; 808/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=148;, score=0.367 total
time=
      1.3s
[CV 3/5; 810/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
[CV 2/5; 810/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.407 total
[CV 4/5; 810/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18
```

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[CV 1/5; 810/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.433 total
time=
      0.1s
[CV 5/5; 810/1000] START bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=18
[CV 4/5; 808/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=148;, score=0.389 total
time= 1.3s
[CV 1/5; 811/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2
[CV 3/5; 809/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=3, n estimators=22;, score=0.397 total
time=
      0.2s
[CV 2/5; 811/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2
[CV 1/5; 811/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2;, score=0.349 total
time= 0.0s
[CV 3/5; 811/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=2
[CV 2/5; 811/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=2;, score=0.373 total
time= 0.0s
[CV 4/5; 811/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2
[CV 3/5; 811/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2;, score=0.372 total
time=
      0.0s
[CV 5/5; 811/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2
[CV 4/5; 811/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2;, score=0.360 total
time= 0.0s
[CV 1/5; 812/1000] START bootstrap=False, max_depth=10, max_features=None,
min samples leaf=1, min samples split=3, n estimators=54
[CV 5/5; 808/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=148;, score=0.384 total
time=
      1.3s
[CV 2/5; 812/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=54
[CV 5/5; 809/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=3, n estimators=22;, score=0.394 total
      0.2s
[CV 3/5; 812/1000] START bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=54
[CV 5/5; 811/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=2;, score=0.363 total
```

time=

0.0s

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[CV 4/5; 812/1000] START bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=54
[CV 3/5; 810/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.392 total
time= 0.1s
[CV 5/5; 812/1000] START bootstrap=False, max depth=10, max features=None,
min samples leaf=1, min samples split=3, n estimators=54
[CV 4/5; 810/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=3, n estimators=18;, score=0.387 total
time=
      0.1s
[CV 1/5; 813/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176
[CV 4/5; 809/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=3, n estimators=22;, score=0.367 total
[CV 2/5; 813/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176
[CV 5/5; 810/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=18;, score=0.389 total
time=
      0.1s
[CV 3/5; 813/1000] START bootstrap=True, max depth=19, max features=None,
min samples leaf=1, min samples split=9, n estimators=176
[CV 4/5; 807/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176;, score=0.406 total
time= 1.7s
[CV 4/5; 813/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176
[CV 5/5; 807/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=176;, score=0.392 total
time=
      1.8s
[CV 5/5; 813/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176
[CV 2/5; 812/1000] END bootstrap=False, max_depth=10, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=54;, score=0.362 total
time= 1.0s
[CV 1/5; 812/1000] END bootstrap=False, max depth=10, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=54;, score=0.389 total
time=
      1.0s
[CV 1/5; 814/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=6
[CV 2/5; 814/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=6
[CV 3/5; 812/1000] END bootstrap=False, max_depth=10, max_features=None,
min samples leaf=1, min samples split=3, n estimators=54;, score=0.329 total
time=
      1.0s
[CV 3/5; 814/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=6
[CV 4/5; 812/1000] END bootstrap=False, max_depth=10, max_features=None,
```

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min_samples_leaf=1, min_samples_split=3, n_estimators=54;, score=0.351 total time= 1.0s
```

[CV 4/5; 814/1000] START bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6

[CV 5/5; 812/1000] END bootstrap=False, max\_depth=10, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=54;, score=0.365 total time= 1.0s

[CV 5/5; 814/1000] START bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6

[CV 1/5; 814/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6;, score=0.383 total time= 0.2s

[CV 2/5; 814/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6;, score=0.347 total time= 0.2s

[CV 1/5; 815/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4

[CV 2/5; 815/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4

[CV 4/5; 814/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6;, score=0.351 total time= 0.2s

[CV 3/5; 814/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6;, score=0.327 total time= 0.2s

[CV 3/5; 815/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4

[CV 4/5; 815/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4

[CV 5/5; 814/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=6;, score=0.357 total time= 0.2s

[CV 5/5; 815/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4

[CV 2/5; 815/1000] END bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4;, score=0.378 total time= 0.1s

[CV 1/5; 815/1000] END bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4;, score=0.396 total time= 0.1s

[CV 1/5; 816/1000] START bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=158

[CV 4/5; 815/1000] END bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=4;, score=0.343 total time= 0.1s

[CV 2/5; 816/1000] START bootstrap=False, max\_depth=8, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=158

[CV 3/5; 816/1000] START bootstrap=False, max\_depth=8, max\_features=sqrt,

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min_samples_leaf=1, min_samples_split=3, n_estimators=158
[CV 3/5; 815/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=4;, score=0.337 total
time= 0.1s
[CV 4/5; 816/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=158
[CV 5/5; 815/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=8, n estimators=4;, score=0.392 total
time=
      0.1s
[CV 5/5; 816/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158
[CV 1/5; 813/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176;, score=0.398 total
time=
        2.5s
[CV 1/5; 817/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 4/5; 813/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176;, score=0.379 total
time=
      2.5s
[CV 2/5; 817/1000] START bootstrap=True, max depth=15, max features=None,
min samples leaf=2, min samples split=5, n estimators=166
[CV 3/5; 816/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158;, score=0.363 total
time=
      1.3s
[CV 3/5; 817/1000] START bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 2/5; 816/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158;, score=0.392 total
[CV 4/5; 817/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166
[CV 1/5; 816/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158;, score=0.405 total
time=
      1.4s
[CV 5/5; 817/1000] START bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=166
[CV 5/5; 816/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158;, score=0.387 total
time= 1.4s
[CV 1/5; 818/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 4/5; 816/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=158;, score=0.392 total
time=
      1.4s
[CV 2/5; 818/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 2/5; 813/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176;, score=0.404 total
```

```
time=
        3.1s
[CV 3/5; 818/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 3/5; 813/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=9, n estimators=176;, score=0.378 total
time=
       3.0s
[CV 4/5; 818/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 5/5; 813/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=176;, score=0.379 total
time=
       3.0s
[CV 5/5; 818/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74
[CV 1/5; 818/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.385 total
time=
      1.5s
[CV 1/5; 819/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 2/5; 818/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=8, n estimators=74;, score=0.372 total
time=
      1.5s
[CV 2/5; 819/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 4/5; 818/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.367 total
time=
       1.4s
[CV 3/5; 819/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 3/5; 818/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=74;, score=0.354 total
time=
      1.6s
[CV 4/5; 819/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 5/5; 818/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=8, n estimators=74;, score=0.385 total
time=
      1.5s
[CV 5/5; 819/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 1/5; 817/1000] END bootstrap=True, max_depth=15, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.411 total
time=
       2.3s
[CV 1/5; 820/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=82
[CV 1/5; 819/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.401 total
```

[CV 2/5; 820/1000] START bootstrap=False, max\_depth=17, max\_features=None,

min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=82

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[CV 2/5; 817/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.397 total
time=
       2.4s
[CV 3/5; 820/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=7, n estimators=82
[CV 2/5; 819/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=50;, score=0.373 total
time= 0.7s
[CV 4/5; 820/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=82
[CV 3/5; 819/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=50;, score=0.346 total
time=
      0.6s
[CV 5/5; 820/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=82
[CV 3/5; 817/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.367 total
       2.6s
[CV 1/5; 821/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=3, min samples split=7, n estimators=132
[CV 5/5; 817/1000] END bootstrap=True, max depth=15, max features=None,
min samples leaf=2, min samples split=5, n estimators=166;, score=0.382 total
time=
       2.6s
[CV 2/5; 821/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132
[CV 4/5; 817/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=166;, score=0.378 total
time=
       2.6s
[CV 3/5; 821/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132
[CV 4/5; 819/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.378 total
time=
      0.7s
[CV 4/5; 821/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=3, min samples split=7, n estimators=132
[CV 5/5; 819/1000] END bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=6, n estimators=50;, score=0.365 total
time=
      0.7s
[CV 5/5; 821/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132
[CV 1/5; 820/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=7, n estimators=82;, score=0.376 total
[CV 1/5; 822/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78
[CV 2/5; 820/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=82;, score=0.373 total
```

time=

2.3s

```
[CV 2/5; 822/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78
[CV 3/5; 820/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=82;, score=0.341 total
time= 2.1s
[CV 3/5; 822/1000] START bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=6, n estimators=78
[CV 4/5; 820/1000] END bootstrap=False, max depth=17, max features=None,
min samples leaf=1, min samples split=7, n estimators=82;, score=0.334 total
time=
       2.1s
[CV 4/5; 822/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78
[CV 5/5; 820/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=7, n estimators=82;, score=0.350 total
[CV 5/5; 822/1000] START bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78
[CV 1/5; 822/1000] END bootstrap=True, max depth=17, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78;, score=0.379 total
time=
      1.1s
[CV 1/5; 823/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=9, n estimators=58
[CV 2/5; 822/1000] END bootstrap=True, max_depth=17, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=78;, score=0.389 total
time= 1.3s
[CV 2/5; 823/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58
[CV 3/5; 822/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=6, n estimators=78;, score=0.367 total
time=
      1.3s
[CV 3/5; 821/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132;, score=0.346 total
time=
      3.1s
[CV 3/5; 823/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=9, n estimators=58
[CV 4/5; 823/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=9, n estimators=58
[CV 2/5; 821/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132;, score=0.375 total
time=
      3.1s
[CV 5/5; 823/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58
[CV 4/5; 822/1000] END bootstrap=True, max depth=17, max features=None,
min samples leaf=2, min samples split=6, n estimators=78;, score=0.369 total
time=
       1.3s
[CV 1/5; 824/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106
[CV 5/5; 822/1000] END bootstrap=True, max depth=17, max features=None,
```

```
min samples leaf=2, min samples split=6, n estimators=78;, score=0.381 total
time=
      1.2s
[CV 2/5; 824/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106
[CV 4/5; 821/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132;, score=0.334 total
time= 3.4s
[CV 3/5; 824/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=106
[CV 1/5; 823/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=9, n estimators=58;, score=0.405 total
time=
       0.7s
[CV 4/5; 824/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106
[CV 1/5; 821/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132;, score=0.379 total
time=
       3.6s
[CV 5/5; 824/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106
[CV 3/5; 823/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58;, score=0.369 total
time= 0.7s
[CV 1/5; 825/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142
[CV 5/5; 821/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=132;, score=0.362 total
time=
      3.7s
[CV 2/5; 825/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142
[CV 4/5; 823/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58;, score=0.401 total
time= 0.8s
[CV 3/5; 825/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142
[CV 2/5; 823/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58;, score=0.398 total
time= 0.8s
[CV 4/5; 825/1000] START bootstrap=False, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142
[CV 5/5; 823/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=58;, score=0.392 total
time=
      0.8s
[CV 5/5; 825/1000] START bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142
[CV 1/5; 824/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106;, score=0.398 total
time=
      1.2s
```

[CV 1/5; 826/1000] START bootstrap=True, max depth=10, max features=None,

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min_samples_leaf=2, min_samples_split=2, n_estimators=26
[CV 2/5; 824/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106;, score=0.417 total
time= 1.0s
[CV 2/5; 826/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=26
[CV 3/5; 824/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106;, score=0.395 total
time=
      1.1s
[CV 3/5; 826/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=26
[CV 4/5; 824/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106;, score=0.379 total
time=
      1.0s
[CV 4/5; 826/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=26
[CV 5/5; 824/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=106;, score=0.384 total
time=
      1.0s
[CV 5/5; 826/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=26
[CV 1/5; 826/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=26;, score=0.418 total
time=
      0.3s
[CV 1/5; 827/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 2/5; 826/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.410 total
[CV 2/5; 827/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 3/5; 826/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.395 total
time=
      0.3s
[CV 3/5; 827/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=50
[CV 1/5; 825/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142;, score=0.409 total
time= 1.0s
[CV 4/5; 827/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 4/5; 826/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.398 total
time=
      0.3s
[CV 5/5; 827/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50
[CV 5/5; 826/1000] END bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=2, n estimators=26;, score=0.397 total
```

```
0.3s
time=
[CV 1/5; 828/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 3/5; 825/1000] END bootstrap=False, max_depth=7, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=142;, score=0.360 total
       1.1s
time=
[CV 2/5; 828/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 2/5; 825/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142;, score=0.400 total
time= 1.1s
[CV 3/5; 828/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 1/5; 827/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.417 total
time=
      0.4s
[CV 4/5; 825/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142;, score=0.378 total
time= 1.1s
[CV 4/5; 828/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=8, n estimators=96
[CV 5/5; 828/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96
[CV 2/5; 827/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.413 total
time=
      0.4s
[CV 1/5; 829/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178
[CV 5/5; 825/1000] END bootstrap=False, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=142;, score=0.400 total
time=
      1.2s
[CV 2/5; 829/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178
[CV 3/5; 827/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=50;, score=0.385 total
time= 0.4s
[CV 3/5; 829/1000] START bootstrap=False, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178
[CV 5/5; 827/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.404 total
time=
      0.4s
[CV 4/5; 829/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178
[CV 4/5; 827/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=50;, score=0.391 total
[CV 5/5; 829/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178
```

```
[CV 2/5; 828/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96;, score=0.398 total
time=
      1.2s
[CV 1/5; 830/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=7, n estimators=192
[CV 4/5; 828/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=8, n estimators=96;, score=0.388 total
time=
      1.5s
[CV 2/5; 830/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192
[CV 1/5; 828/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=8, n estimators=96;, score=0.408 total
time=
      1.6s
[CV 3/5; 830/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192
[CV 5/5; 828/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=96;, score=0.375 total
time= 1.5s
[CV 4/5; 830/1000] START bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=7, n estimators=192
[CV 3/5; 828/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=8, n estimators=96;, score=0.382 total
time=
      1.5s
[CV 5/5; 830/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192
[CV 1/5; 829/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178;, score=0.390 total
time=
       3.2s
[CV 1/5; 831/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56
[CV 1/5; 831/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56;, score=0.408 total
time=
      0.4s
[CV 2/5; 831/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=56
[CV 2/5; 829/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=178;, score=0.372 total
time=
       3.5s
[CV 3/5; 831/1000] START bootstrap=False, max_depth=6, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56
[CV 4/5; 829/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178;, score=0.366 total
[CV 4/5; 831/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56
[CV 3/5; 829/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178;, score=0.351 total
```

time=

3.5s

```
[CV 5/5; 831/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56
[CV 5/5; 829/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=178;, score=0.388 total
time= 3.5s
[CV 1/5; 832/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26
[CV 3/5; 831/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=56;, score=0.365 total
time=
      0.3s
[CV 2/5; 832/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 2/5; 831/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=56;, score=0.392 total
[CV 3/5; 832/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 4/5; 831/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=56;, score=0.372 total
time=
      0.4s
[CV 4/5; 832/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26
[CV 1/5; 832/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26;, score=0.392 total
time= 0.3s
[CV 5/5; 832/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26
[CV 5/5; 831/1000] END bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=56;, score=0.401 total
time=
      0.4s
[CV 1/5; 833/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196
[CV 2/5; 832/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26;, score=0.391 total
time=
      0.3s
[CV 2/5; 833/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=196
[CV 3/5; 832/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=26;, score=0.340 total
time=
      0.3s
[CV 3/5; 833/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196
[CV 4/5; 832/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=26;, score=0.384 total
time=
       0.3s
[CV 4/5; 833/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196
[CV 5/5; 832/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
```

```
min samples leaf=1, min samples split=6, n estimators=26;, score=0.373 total
time=
      0.3s
[CV 5/5; 833/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196
[CV 1/5; 830/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192;, score=0.379 total
time= 4.3s
[CV 1/5; 834/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=1, min samples split=6, n estimators=68
[CV 2/5; 833/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196;, score=0.404 total
       1.5s
time=
[CV 2/5; 834/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=68
[CV 1/5; 833/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196;, score=0.414 total
time=
      1.7s
[CV 3/5; 834/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=68
[CV 1/5; 834/1000] END bootstrap=True, max depth=5, max features=None,
min samples leaf=1, min samples split=6, n estimators=68;, score=0.420 total
time= 0.5s
[CV 4/5; 834/1000] START bootstrap=True, max_depth=5, max_features=None,
min samples leaf=1, min samples split=6, n estimators=68
[CV 4/5; 830/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192;, score=0.331 total
time=
      4.6s
[CV 5/5; 834/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=68
[CV 4/5; 833/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196;, score=0.394 total
      1.7s
[CV 1/5; 835/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156
[CV 3/5; 833/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196;, score=0.378 total
time= 1.8s
[CV 2/5; 835/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156
[CV 5/5; 833/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=196;, score=0.385 total
      1.8s
time=
[CV 3/5; 835/1000] START bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156
[CV 2/5; 834/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=1, min samples split=6, n estimators=68;, score=0.406 total
time=
      0.5s
[CV 4/5; 835/1000] START bootstrap=False, max depth=6, max features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=8, n_estimators=156
[CV 3/5; 834/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=1, min samples split=6, n estimators=68;, score=0.382 total
time= 0.5s
[CV 5/5; 835/1000] START bootstrap=False, max depth=6, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=156
[CV 5/5; 830/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192;, score=0.365 total
time=
      4.9s
[CV 1/5; 836/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 2/5; 830/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192;, score=0.385 total
time=
       4.9s
[CV 2/5; 836/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 5/5; 834/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=1, min samples split=6, n estimators=68;, score=0.398 total
time=
      0.5s
[CV 4/5; 834/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=68;, score=0.373 total
time= 0.5s
[CV 3/5; 836/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 4/5; 836/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 3/5; 830/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=192;, score=0.337 total
[CV 5/5; 836/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30
[CV 1/5; 836/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.417 total
time=
      0.2s
[CV 1/5; 837/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=90
[CV 2/5; 836/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=30;, score=0.394 total
time= 0.2s
[CV 2/5; 837/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90
[CV 3/5; 836/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.389 total
time=
       0.2s
[CV 3/5; 837/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90
[CV 4/5; 836/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.417 total
```

```
time=
        0.2s
[CV 4/5; 837/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90
[CV 5/5; 836/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=30;, score=0.392 total
time=
       0.2s
[CV 5/5; 837/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90
[CV 1/5; 835/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156;, score=0.408 total
time=
      1.1s
[CV 1/5; 838/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10
[CV 3/5; 835/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156;, score=0.356 total
time=
      1.0s
[CV 2/5; 838/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10
[CV 2/5; 835/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=156;, score=0.389 total
time=
      1.1s
[CV 3/5; 838/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10
[CV 1/5; 838/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10;, score=0.405 total
time=
       0.1s
[CV 4/5; 838/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10
[CV 2/5; 838/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10;, score=0.363 total
time=
      0.1s
[CV 5/5; 838/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10
[CV 5/5; 835/1000] END bootstrap=False, max_depth=6, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=156;, score=0.413 total
      1.1s
time=
[CV 1/5; 839/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64
[CV 5/5; 838/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=10;, score=0.370 total
time=
      0.1s
[CV 2/5; 839/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64
[CV 4/5; 835/1000] END bootstrap=False, max depth=6, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=156;, score=0.379 total
[CV 3/5; 838/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=10;, score=0.375 total
```

```
time=
        0.1s
[CV 3/5; 839/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64
[CV 4/5; 839/1000] START bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=5, n estimators=64
[CV 4/5; 838/1000] END bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=10;, score=0.375 total
time= 0.1s
[CV 5/5; 839/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64
[CV 1/5; 837/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=90;, score=0.411 total
time=
      0.9s
[CV 1/5; 840/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130
[CV 2/5; 837/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90;, score=0.401 total
time= 0.9s
[CV 2/5; 840/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=130
[CV 3/5; 837/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=90;, score=0.378 total
time=
      0.9s
[CV 3/5; 840/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130
[CV 4/5; 837/1000] END bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=90;, score=0.400 total
time=
      0.9s
[CV 4/5; 840/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130
[CV 5/5; 837/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=90;, score=0.391 total
time=
      0.9s
[CV 5/5; 840/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=130
[CV 2/5; 839/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=5, n estimators=64;, score=0.362 total
time=
      1.5s
[CV 1/5; 841/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172
[CV 1/5; 839/1000] END bootstrap=False, max_depth=17, max_features=None,
min samples leaf=1, min samples split=5, n estimators=64;, score=0.379 total
      1.5s
[CV 2/5; 841/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172
[CV 4/5; 839/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64;, score=0.337 total
time=
       1.7s
```

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[CV 3/5; 841/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172
[CV 5/5; 839/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=64;, score=0.348 total
time= 1.7s
[CV 4/5; 841/1000] START bootstrap=False, max depth=17, max features=None,
min samples leaf=1, min samples split=3, n estimators=172
[CV 3/5; 839/1000] END bootstrap=False, max depth=17, max features=None,
min samples leaf=1, min samples split=5, n estimators=64;, score=0.350 total
time=
      1.7s
[CV 5/5; 841/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172
[CV 2/5; 840/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130;, score=0.376 total
[CV 1/5; 842/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124
[CV 4/5; 840/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130;, score=0.360 total
time=
      1.8s
[CV 2/5; 842/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=3, min samples split=5, n estimators=124
[CV 3/5; 840/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130;, score=0.359 total
time= 1.9s
[CV 3/5; 842/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124
[CV 1/5; 840/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130;, score=0.404 total
time=
       2.0s
[CV 4/5; 842/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124
[CV 5/5; 840/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=130;, score=0.363 total
time=
      1.9s
[CV 5/5; 842/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=3, min samples split=5, n estimators=124
[CV 3/5; 842/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124;, score=0.404 total
time=
      1.2s
[CV 1/5; 843/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 1/5; 842/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124;, score=0.411 total
time=
       1.4s
[CV 2/5; 843/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 2/5; 842/1000] END bootstrap=True, max_depth=9, max_features=None,
```

```
min_samples_leaf=3, min_samples_split=5, n_estimators=124;, score=0.403 total
time=
      1.4s
[CV 3/5; 843/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 4/5; 842/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124;, score=0.406 total
time= 1.4s
[CV 4/5; 843/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=174
[CV 5/5; 842/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=124;, score=0.389 total
[CV 5/5; 843/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174
[CV 1/5; 843/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.406 total
time=
       2.1s
[CV 1/5; 844/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 2/5; 843/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.391 total
time=
       2.2s
[CV 2/5; 844/1000] START bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=5, n estimators=184
[CV 1/5; 841/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172;, score=0.385 total
time=
      4.1s
[CV 3/5; 844/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 3/5; 843/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.353 total
       2.2s
[CV 4/5; 844/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 4/5; 843/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.384 total
      2.2s
[CV 5/5; 843/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=174;, score=0.375 total
time=
       2.2s
[CV 5/5; 844/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184
[CV 1/5; 845/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8
[CV 1/5; 845/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8;, score=0.382 total
time=
      0.2s
```

[CV 2/5; 845/1000] START bootstrap=False, max\_depth=14, max\_features=None,

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min_samples_leaf=3, min_samples_split=8, n_estimators=8
[CV 2/5; 845/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8;, score=0.376 total
time= 0.2s
[CV 2/5; 841/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172;, score=0.366 total
[CV 3/5; 845/1000] START bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=8, n estimators=8
[CV 4/5; 845/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8
[CV 4/5; 841/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172;, score=0.329 total
time=
       4.5s
[CV 5/5; 845/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8
[CV 3/5; 845/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8;, score=0.343 total
time=
      0.2s
[CV 1/5; 846/1000] START bootstrap=True, max depth=18, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=108
[CV 4/5; 845/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8;, score=0.335 total
time=
      0.2s
[CV 2/5; 846/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108
[CV 3/5; 841/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172;, score=0.350 total
[CV 3/5; 846/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108
[CV 5/5; 841/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=172;, score=0.351 total
time=
      4.6s
[CV 5/5; 845/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=8;, score=0.375 total
time= 0.2s
[CV 4/5; 846/1000] START bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108
[CV 5/5; 846/1000] START bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108
[CV 1/5; 846/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108;, score=0.399 total
time=
      1.1s
[CV 1/5; 847/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76
[CV 2/5; 846/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108;, score=0.420 total
```

```
time=
        1.0s
[CV 2/5; 847/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76
[CV 3/5; 846/1000] END bootstrap=True, max_depth=18, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=108;, score=0.370 total
time=
        1.0s
[CV 3/5; 847/1000] START bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76
[CV 5/5; 846/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108;, score=0.392 total
time= 1.0s
[CV 4/5; 847/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76
[CV 4/5; 846/1000] END bootstrap=True, max depth=18, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=108;, score=0.388 total
time=
      1.0s
[CV 5/5; 847/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76
[CV 1/5; 844/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=5, n estimators=184;, score=0.402 total
time=
      2.7s
[CV 1/5; 848/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 3/5; 844/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.379 total
time=
       2.5s
[CV 2/5; 848/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 2/5; 844/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.406 total
time=
       2.8s
[CV 3/5; 848/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 4/5; 844/1000] END bootstrap=True, max_depth=14, max_features=None,
min samples leaf=1, min samples split=5, n estimators=184;, score=0.370 total
       2.7s
time=
[CV 4/5; 848/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 5/5; 844/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=184;, score=0.387 total
time=
       2.8s
[CV 5/5; 848/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58
[CV 2/5; 848/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58;, score=0.369 total
       0.8s[CV 1/5; 848/1000] END bootstrap=False, max_depth=8,
max_features=None, min_samples_leaf=3, min_samples_split=7, n_estimators=58;,
```

0.9s

score=0.373 total time=

```
[CV 1/5; 849/1000] START bootstrap=True, max_depth=7, max_features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=24
[CV 2/5; 849/1000] START bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24
[CV 2/5; 849/1000] END bootstrap=True, max depth=7, max features=None,
min samples leaf=3, min samples split=8, n estimators=24;, score=0.422 total
time=
      0.2s
[CV 3/5; 849/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=24
[CV 1/5; 849/1000] END bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24;, score=0.411 total
time=
      0.2s
[CV 4/5; 849/1000] START bootstrap=True, max depth=7, max features=None,
min_samples_leaf=3, min_samples_split=8, n_estimators=24
[CV 3/5; 848/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58;, score=0.354 total
time= 0.9s
[CV 5/5; 849/1000] START bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24
[CV 4/5; 848/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=3, min samples split=7, n estimators=58;, score=0.354 total
time= 0.9s
[CV 1/5; 850/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160
[CV 3/5; 849/1000] END bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24;, score=0.401 total
time=
       0.3s
[CV 2/5; 850/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160
[CV 5/5; 848/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=58;, score=0.366 total
time=
      0.8s
[CV 3/5; 850/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=160
[CV 4/5; 849/1000] END bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24;, score=0.394 total
time=
      0.3s
[CV 4/5; 850/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160
[CV 5/5; 849/1000] END bootstrap=True, max_depth=7, max_features=None,
min samples leaf=3, min samples split=8, n estimators=24;, score=0.401 total
[CV 5/5; 850/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160
[CV 4/5; 847/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76;, score=0.348 total
time=
       2.2s
```

```
[CV 1/5; 851/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118
[CV 5/5; 847/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76;, score=0.329 total
time= 2.3s
[CV 2/5; 851/1000] START bootstrap=False, max depth=14, max features=None,
min samples leaf=2, min samples split=5, n estimators=118
[CV 2/5; 847/1000] END bootstrap=False, max depth=None, max features=None,
min samples leaf=2, min samples split=8, n estimators=76;, score=0.319 total
time=
       2.4s
[CV 3/5; 851/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118
[CV 3/5; 847/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=8, n estimators=76;, score=0.335 total
[CV 4/5; 851/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118
[CV 1/5; 847/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=76;, score=0.345 total
time=
       2.5s
[CV 5/5; 851/1000] START bootstrap=False, max depth=14, max features=None,
min samples leaf=2, min samples split=5, n estimators=118
[CV 1/5; 850/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160;, score=0.439 total
time= 1.1s
[CV 1/5; 852/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 2/5; 850/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160;, score=0.411 total
time=
      1.1s
[CV 2/5; 852/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 3/5; 850/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160;, score=0.403 total
time=
      1.1s
[CV 3/5; 852/1000] START bootstrap=False, max depth=17, max features=None,
min samples leaf=3, min samples split=7, n estimators=146
[CV 4/5; 850/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160;, score=0.403 total
time=
      1.1s
[CV 4/5; 852/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 5/5; 850/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=160;, score=0.411 total
time=
       1.1s
[CV 5/5; 852/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146
[CV 5/5; 851/1000] END bootstrap=False, max_depth=14, max_features=None,
```

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min_samples_leaf=2, min_samples_split=5, n_estimators=118;, score=0.360 total
time=
       2.3s
[CV 1/5; 853/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=42
[CV 1/5; 853/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=42;, score=0.408 total
time= 0.2s
[CV 2/5; 853/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=42
[CV 1/5; 851/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118;, score=0.387 total
       2.8s
time=
[CV 3/5; 853/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=42
[CV 4/5; 851/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118;, score=0.347 total
time=
       2.8s
[CV 4/5; 853/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=42
[CV 2/5; 853/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.401 total
time= 0.3s
[CV 5/5; 853/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=42
[CV 3/5; 851/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118;, score=0.338 total
time=
      2.9s
[CV 1/5; 854/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134
[CV 3/5; 853/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.360 total
      0.2s
[CV 2/5; 854/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134
[CV 2/5; 851/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=118;, score=0.365 total
time= 3.0s
[CV 3/5; 854/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134
[CV 4/5; 853/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=42;, score=0.392 total
      0.2s
time=
[CV 4/5; 854/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134
[CV 5/5; 853/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=42;, score=0.410 total
time=
       0.2s
[CV 5/5; 854/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
```

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min_samples_leaf=2, min_samples_split=8, n_estimators=134
[CV 1/5; 854/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134;, score=0.423 total
time= 0.7s
[CV 1/5; 855/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=68
[CV 2/5; 854/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134;, score=0.414 total
time=
      0.7s
[CV 2/5; 855/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68
[CV 4/5; 854/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134;, score=0.410 total
time=
       0.7s
[CV 3/5; 855/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68
[CV 1/5; 852/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.379 total
time=
      3.3s
[CV 4/5; 855/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=1, min samples split=2, n estimators=68
[CV 3/5; 854/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134;, score=0.398 total
time=
      0.8s
[CV 5/5; 855/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68
[CV 5/5; 854/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=134;, score=0.394 total
[CV 1/5; 856/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=76
[CV 4/5; 852/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.335 total
time=
       3.6s
[CV 2/5; 856/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=5, n estimators=76
[CV 5/5; 852/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.365 total
time=
      3.8s
[CV 3/5; 856/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=76
[CV 3/5; 852/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=146;, score=0.346 total
time=
       3.9s
[CV 4/5; 856/1000] START bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=5, n estimators=76[CV 2/5; 852/1000] END
bootstrap=False, max_depth=17, max_features=None, min_samples_leaf=3,
min_samples_split=7, n_estimators=146;, score=0.375 total time=
```

```
[CV 5/5; 856/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=76
[CV 1/5; 855/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=68;, score=0.398 total
time=
        1.0s
[CV 1/5; 857/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 4/5; 855/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68;, score=0.360 total
time= 0.9s
[CV 2/5; 857/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 2/5; 855/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68;, score=0.372 total
time=
      1.0s
[CV 3/5; 857/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 3/5; 855/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=68;, score=0.344 total
time=
      1.0s
[CV 4/5; 857/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 5/5; 855/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=68;, score=0.350 total
time=
       1.1s
[CV 5/5; 857/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190
[CV 1/5; 856/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=76;, score=0.396 total
time=
      1.8s
[CV 1/5; 858/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=188
[CV 1/5; 857/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=190;, score=0.430 total
time= 1.0s
[CV 2/5; 857/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.407 total
time= 1.0s
[CV 2/5; 858/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=188
[CV 3/5; 858/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=188
[CV 3/5; 857/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.400 total
[CV 4/5; 858/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=188
```

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[CV 4/5; 857/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=190;, score=0.411 total
time=
      1.1s
[CV 5/5; 858/1000] START bootstrap=False, max_depth=9, max_features=None,
min samples leaf=2, min samples split=3, n estimators=188
[CV 5/5; 857/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=190;, score=0.398 total
time=
      1.1s
[CV 1/5; 859/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142
[CV 2/5; 856/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=5, n estimators=76;, score=0.375 total
time=
      1.9s
[CV 2/5; 859/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142
[CV 5/5; 856/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=76;, score=0.387 total
time= 1.8s
[CV 3/5; 859/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=7, n estimators=142
[CV 4/5; 856/1000] END bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=5, n estimators=76;, score=0.344 total
time=
      1.8s
[CV 4/5; 859/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142
[CV 3/5; 856/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=5, n estimators=76;, score=0.341 total
time=
       2.0s
[CV 5/5; 859/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142
[CV 1/5; 859/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142;, score=0.390 total
time=
      2.5s
[CV 1/5; 860/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=9, n estimators=166
[CV 3/5; 858/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=2, min samples split=3, n estimators=188;, score=0.344 total
time=
       2.9s
[CV 2/5; 860/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166
[CV 2/5; 859/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142;, score=0.417 total
[CV 3/5; 860/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166
[CV 4/5; 859/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=142;, score=0.367 total
time=
       2.4s
```

```
[CV 4/5; 860/1000] START bootstrap=False, max_depth=12, max_features=None, min_samples_leaf=2, min_samples_split=9, n_estimators=166
[CV 2/5; 858/1000] END bootstrap=False, max_depth=9, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=188;, score=0.365 total time= 3.0s

[CV 5/5; 860/1000] START bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=166

[CV 5/5; 859/1000] END bootstrap=True, max\_depth=19, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=142;, score=0.369 total time= 2.4s

[CV 1/5; 861/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22

[CV 3/5; 859/1000] END bootstrap=True, max\_depth=19, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=7, n\_estimators=142;, score=0.378 total time= 2.6s

[CV 2/5; 861/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22

[CV 4/5; 858/1000] END bootstrap=False, max\_depth=9, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=188;, score=0.350 total time= 3.2s

[CV 1/5; 858/1000] END bootstrap=False, max\_depth=9, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=188;, score=0.377 total time= 3.3s

[CV 3/5; 861/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22

[CV 4/5; 861/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22

[CV 5/5; 858/1000] END bootstrap=False, max\_depth=9, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=188;, score=0.362 total time= 3.3s

[CV 5/5; 861/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22

[CV 2/5; 861/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22;, score=0.387 total time= 0.4s

[CV 1/5; 862/1000] START bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=72

[CV 1/5; 861/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22;, score=0.371 total time= 0.4s

[CV 2/5; 862/1000] START bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=72

[CV 4/5; 861/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=22;, score=0.360 total time= 0.4s

[CV 3/5; 862/1000] START bootstrap=True, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=5, n\_estimators=72

[CV 3/5; 861/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt,

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min samples leaf=3, min samples split=2, n estimators=22;, score=0.363 total
time=
      0.4s
[CV 4/5; 862/1000] START bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72
[CV 5/5; 861/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=22;, score=0.378 total
time= 0.3s
[CV 5/5; 862/1000] START bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72
[CV 1/5; 862/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.409 total
time=
       1.1s
[CV 1/5; 863/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 2/5; 862/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.408 total
time=
      1.1s
[CV 2/5; 863/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 4/5; 862/1000] END bootstrap=True, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=72;, score=0.367 total
time= 1.1s
[CV 3/5; 863/1000] START bootstrap=True, max_depth=10, max_features=None,
min samples leaf=3, min samples split=4, n estimators=32
[CV 3/5; 862/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.372 total
time=
      1.1s
[CV 4/5; 863/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 5/5; 862/1000] END bootstrap=True, max_depth=15, max_features=None,
min samples leaf=2, min samples split=5, n estimators=72;, score=0.384 total
      1.1s
[CV 5/5; 863/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 2/5; 863/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32;, score=0.404 total
time= 0.4s
[CV 1/5; 864/1000] START bootstrap=False, max_depth=7, max_features=None,
```

- min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=84
- [CV 1/5; 863/1000] END bootstrap=True, max\_depth=10, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=4, n\_estimators=32;, score=0.414 total 0.5s time=
- [CV 2/5; 864/1000] START bootstrap=False, max depth=7, max features=None, min\_samples\_leaf=1, min\_samples\_split=8, n\_estimators=84
- [CV 3/5; 863/1000] END bootstrap=True, max depth=10, max features=None, min samples leaf=3, min samples split=4, n estimators=32;, score=0.389 total time= 0.4s
- [CV 3/5; 864/1000] START bootstrap=False, max depth=7, max features=None,

```
min_samples_leaf=1, min_samples_split=8, n_estimators=84
[CV 4/5; 863/1000] END bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=4, n estimators=32;, score=0.419 total
time= 0.4s
[CV 4/5; 864/1000] START bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=8, n estimators=84
[CV 5/5; 863/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32;, score=0.394 total
time=
      0.4s
[CV 5/5; 864/1000] START bootstrap=False, max_depth=7, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84
[CV 4/5; 860/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166;, score=0.369 total
time=
        3.1s
[CV 1/5; 865/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40
[CV 1/5; 864/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.398 total
time=
      1.1s
[CV 2/5; 865/1000] START bootstrap=False, max depth=11, max features=None,
min samples leaf=3, min samples split=9, n estimators=40
[CV 5/5; 860/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166;, score=0.365 total
time=
       3.2s
[CV 3/5; 865/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40
[CV 3/5; 864/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.346 total
[CV 4/5; 865/1000] START bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40
[CV 4/5; 864/1000] END bootstrap=False, max depth=7, max features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.367 total
time=
      1.2s
[CV 5/5; 865/1000] START bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=40
[CV 2/5; 864/1000] END bootstrap=False, max depth=7, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=84;, score=0.385 total
time=
      1.2s
[CV 1/5; 866/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 1/5; 860/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166;, score=0.385 total
time=
       3.5s
[CV 2/5; 866/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 5/5; 864/1000] END bootstrap=False, max_depth=7, max_features=None,
min samples leaf=1, min samples split=8, n estimators=84;, score=0.367 total
```

```
time=
        1.2s
[CV 3/5; 866/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 3/5; 860/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=9, n estimators=166;, score=0.356 total
time=
       3.5s
[CV 4/5; 866/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 2/5; 860/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=166;, score=0.379 total
time=
       3.6s
[CV 5/5; 866/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 1/5; 865/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40;, score=0.389 total
time=
      0.7s
[CV 1/5; 867/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140
[CV 3/5; 865/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=40;, score=0.351 total
time=
      0.7s
[CV 2/5; 867/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140
[CV 2/5; 865/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40;, score=0.372 total
time=
       0.8s
[CV 3/5; 867/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140
[CV 4/5; 865/1000] END bootstrap=False, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=40;, score=0.367 total
time=
      0.8s
[CV 4/5; 867/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140
[CV 5/5; 865/1000] END bootstrap=False, max_depth=11, max_features=None,
min samples leaf=3, min samples split=9, n estimators=40;, score=0.388 total
time= 0.8s
[CV 5/5; 867/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140
[CV 1/5; 866/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.418 total
time=
      0.9s
[CV 1/5; 868/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80
[CV 3/5; 866/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.376 total
[CV 2/5; 868/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80
```

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[CV 2/5; 866/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.413 total
time=
      1.0s
[CV 3/5; 868/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=80
[CV 4/5; 866/1000] END bootstrap=True, max depth=6, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=196;, score=0.406 total
time= 0.9s
[CV 4/5; 868/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80
[CV 5/5; 866/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.382 total
time=
      1.0s
[CV 5/5; 868/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80
[CV 1/5; 868/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80;, score=0.414 total
time= 0.5s
[CV 1/5; 869/1000] START bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=34
[CV 2/5; 868/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=80;, score=0.395 total
time= 0.5s
[CV 2/5; 869/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 4/5; 868/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=80;, score=0.382 total
time=
       0.5s
[CV 3/5; 869/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 3/5; 868/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=80;, score=0.348 total
time=
      0.6s
[CV 4/5; 869/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=3, min samples split=6, n estimators=34
[CV 5/5; 868/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=80;, score=0.411 total
time=
      0.5s
[CV 5/5; 869/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=34
[CV 1/5; 869/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=34;, score=0.402 total
      0.4s
[CV 1/5; 870/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136
[CV 2/5; 869/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=34;, score=0.389 total
time=
       0.4s
```

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[CV 2/5; 870/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136
[CV 3/5; 869/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=34;, score=0.408 total
time= 0.4s
[CV 3/5; 870/1000] START bootstrap=False, max depth=19, max features=None,
min samples leaf=2, min samples split=8, n estimators=136
[CV 5/5; 869/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=34;, score=0.403 total
time=
      0.4s
[CV 4/5; 870/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136
[CV 4/5; 869/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=34;, score=0.404 total
[CV 5/5; 870/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136
[CV 2/5; 867/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140;, score=0.398 total
time=
      1.7s
[CV 1/5; 871/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=5, n estimators=30
[CV 1/5; 867/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=3, min samples split=6, n estimators=140;, score=0.409 total
time= 1.8s
[CV 2/5; 871/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=30
[CV 4/5; 867/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140;, score=0.398 total
time=
      1.8s
[CV 3/5; 871/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=30
[CV 1/5; 871/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=30;, score=0.417 total
time= 0.3s
[CV 3/5; 867/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=6, n estimators=140;, score=0.387 total
time=
      1.9s
[CV 4/5; 871/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=30
[CV 5/5; 871/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=30
[CV 5/5; 867/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=140;, score=0.392 total
time=
       1.8s
[CV 1/5; 872/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=60
[CV 2/5; 871/1000] END bootstrap=True, max depth=11, max features=None,
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- min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=30;, score=0.417 total time= 0.4s
- [CV 2/5; 872/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60
- [CV 4/5; 871/1000] END bootstrap=True, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=30;, score=0.382 total time= 0.3s
- [CV 3/5; 872/1000] START bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=3, n estimators=60
- [CV 3/5; 871/1000] END bootstrap=True, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=30;, score=0.385 total time= 0.4s
- [CV 4/5; 872/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60
- [CV 5/5; 871/1000] END bootstrap=True, max\_depth=11, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=5, n\_estimators=30;, score=0.395 total time= 0.4s
- [CV 5/5; 872/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60
- [CV 1/5; 872/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60;, score=0.383 total time= 1.1s
- [CV 1/5; 873/1000] START bootstrap=False, max\_depth=20, max\_features=None, min samples leaf=2, min samples split=8, n estimators=26
- [CV 3/5; 872/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60;, score=0.372 total time= 0.9s
- [CV 2/5; 873/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=26
- [CV 2/5; 872/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60;, score=0.389 total time= 1.0s
- [CV 3/5; 873/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=26
- [CV 4/5; 872/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60;, score=0.362 total time= 1.0s
- [CV 4/5; 873/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=26
- [CV 5/5; 872/1000] END bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=3, n\_estimators=60;, score=0.389 total time= 1.0s
- [CV 5/5; 873/1000] START bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=26
- [CV 1/5; 873/1000] END bootstrap=False, max\_depth=20, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=26;, score=0.363 total time= 0.8s
- [CV 1/5; 874/1000] START bootstrap=False, max\_depth=8, max\_features=None,

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min_samples_leaf=1, min_samples_split=8, n_estimators=30
[CV 2/5; 873/1000] END bootstrap=False, max_depth=20, max_features=None,
min samples leaf=2, min samples split=8, n estimators=26;, score=0.360 total
time= 0.8s
[CV 2/5; 874/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=8, n estimators=30
[CV 3/5; 873/1000] END bootstrap=False, max depth=20, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=26;, score=0.324 total
time=
      0.8s
[CV 3/5; 874/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=30
[CV 4/5; 873/1000] END bootstrap=False, max_depth=20, max_features=None,
min samples leaf=2, min samples split=8, n estimators=26;, score=0.341 total
time=
       0.7s
[CV 4/5; 874/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=30
[CV 5/5; 873/1000] END bootstrap=False, max_depth=20, max_features=None,
min samples leaf=2, min samples split=8, n estimators=26;, score=0.338 total
time=
      0.7s
[CV 5/5; 874/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=8, n estimators=30
[CV 1/5; 874/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=30;, score=0.373 total
time=
      0.4s
[CV 1/5; 875/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 2/5; 874/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=8, n estimators=30;, score=0.373 total
[CV 2/5; 875/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 4/5; 874/1000] END bootstrap=False, max_depth=8, max_features=None,
min samples leaf=1, min samples split=8, n estimators=30;, score=0.356 total
time=
      0.5s
[CV 3/5; 875/1000] START bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=9, n estimators=40
[CV 3/5; 874/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=8, n_estimators=30;, score=0.350 total
time= 0.5s
[CV 4/5; 875/1000] START bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 5/5; 874/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=8, n estimators=30;, score=0.367 total
time=
       0.5s
[CV 5/5; 875/1000] START bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40
[CV 1/5; 870/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136;, score=0.383 total
```

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time=
        3.8s
[CV 1/5; 876/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128
[CV 5/5; 870/1000] END bootstrap=False, max_depth=19, max_features=None,
min samples leaf=2, min samples split=8, n estimators=136;, score=0.354 total
time=
       3.6s
[CV 2/5; 876/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128
[CV 2/5; 875/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.398 total
time= 0.6s
[CV 3/5; 876/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128
[CV 4/5; 870/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136;, score=0.346 total
time=
      3.6s
[CV 4/5; 876/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128
[CV 3/5; 870/1000] END bootstrap=False, max_depth=19, max_features=None,
min samples leaf=2, min samples split=8, n estimators=136;, score=0.315 total
time=
      3.7s
[CV 5/5; 876/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128
[CV 1/5; 875/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.425 total
time=
       0.8s
[CV 1/5; 877/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104
[CV 2/5; 870/1000] END bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=136;, score=0.357 total
time=
       3.8s
[CV 2/5; 877/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104
[CV 3/5; 875/1000] END bootstrap=True, max_depth=19, max_features=None,
min samples leaf=1, min samples split=9, n estimators=40;, score=0.385 total
time= 0.7s
[CV 3/5; 877/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104
[CV 4/5; 875/1000] END bootstrap=True, max_depth=19, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.382 total
time=
      0.7s
[CV 4/5; 877/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104
[CV 5/5; 875/1000] END bootstrap=True, max depth=19, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=40;, score=0.389 total
[CV 5/5; 877/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
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min\_samples\_leaf=3, min\_samples\_split=8, n\_estimators=104

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[CV 1/5; 877/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104;, score=0.406 total
time=
      0.8s
[CV 1/5; 878/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=50
[CV 2/5; 877/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=104;, score=0.401 total
time=
      0.8s
[CV 2/5; 878/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50
[CV 3/5; 877/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104;, score=0.381 total
time=
      0.9s
[CV 3/5; 878/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50
[CV 4/5; 877/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=104;, score=0.394 total
time= 0.9s
[CV 4/5; 878/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=50
[CV 5/5; 877/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=104;, score=0.392 total
time=
      0.8s
[CV 5/5; 878/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50
[CV 3/5; 876/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128;, score=0.363 total
time=
       1.4s
[CV 1/5; 879/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10
[CV 1/5; 878/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50;, score=0.392 total
time=
      0.6s
[CV 2/5; 879/1000] START bootstrap=False, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=10
[CV 4/5; 876/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=8, n estimators=128;, score=0.387 total
time=
      1.6s
[CV 3/5; 879/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10
[CV 2/5; 876/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128;, score=0.394 total
[CV 4/5; 879/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10
[CV 5/5; 876/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128;, score=0.381 total
```

time=

1.6s

```
[CV 5/5; 879/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10
[CV 1/5; 879/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10;, score=0.396 total
time= 0.2s
[CV 1/5; 880/1000] START bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18
[CV 2/5; 878/1000] END bootstrap=False, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=50;, score=0.389 total
time=
      0.7s
[CV 2/5; 880/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=18
[CV 1/5; 876/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=128;, score=0.412 total
[CV 3/5; 880/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=18
[CV 2/5; 879/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10;, score=0.400 total
time=
      0.1s
[CV 4/5; 880/1000] START bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18
[CV 3/5; 879/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10;, score=0.376 total
time= 0.2s
[CV 5/5; 880/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18[CV 4/5; 879/1000] END
bootstrap=False, max depth=17, max features=sqrt, min samples leaf=2,
min_samples_split=2, n_estimators=10;, score=0.362 total time=
[CV 1/5; 881/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146
[CV 5/5; 879/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=10;, score=0.372 total
time=
      0.2s
[CV 2/5; 881/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=1, min samples split=7, n estimators=146
[CV 3/5; 878/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50;, score=0.365 total
time=
      0.7s
[CV 3/5; 881/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146
[CV 4/5; 878/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=5, n estimators=50;, score=0.370 total
time=
       0.8s
[CV 4/5; 881/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146
[CV 1/5; 880/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
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min samples leaf=1, min samples split=4, n estimators=18;, score=0.382 total
time=
      0.3s
[CV 5/5; 881/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146
[CV 5/5; 878/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=50;, score=0.367 total
time= 0.7s
[CV 1/5; 882/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=142
[CV 2/5; 880/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.385 total
time=
       0.3s
[CV 2/5; 882/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142
[CV 4/5; 880/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.348 total
time=
      0.3s
[CV 3/5; 882/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142
[CV 3/5; 880/1000] END bootstrap=False, max depth=19, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.375 total
time= 0.3s
[CV 4/5; 882/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=2, n estimators=142
[CV 5/5; 880/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=18;, score=0.348 total
time=
      0.3s
[CV 5/5; 882/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142
[CV 1/5; 882/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.405 total
      1.2s
[CV 1/5; 883/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 2/5; 882/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.394 total
time= 1.2s
[CV 2/5; 883/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 3/5; 882/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.363 total
time=
      1.3s
[CV 3/5; 883/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 5/5; 881/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146;, score=0.389 total
time=
      1.3s
```

[CV 4/5; 883/1000] START bootstrap=True, max\_depth=13, max\_features=None,

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min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 5/5; 882/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.385 total
      1.2s
[CV 5/5; 883/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=3, min samples split=4, n estimators=194
[CV 2/5; 881/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146;, score=0.410 total
time=
      1.5s
[CV 4/5; 882/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=2, n_estimators=142;, score=0.384 total
       1.3s
[CV 1/5; 884/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=84
[CV 2/5; 884/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=84
[CV 1/5; 881/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146;, score=0.409 total
time=
      1.5s
[CV 3/5; 884/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=3, min samples split=2, n estimators=84
[CV 4/5; 881/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146;, score=0.410 total
time=
      1.4s
[CV 4/5; 884/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=84
[CV 3/5; 881/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=146;, score=0.398 total
[CV 5/5; 884/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=84
[CV 4/5; 884/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=2, n estimators=84;, score=0.372 total
time=
      1.6s
[CV 1/5; 885/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126
[CV 1/5; 884/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=84;, score=0.392 total
time= 1.9s
[CV 2/5; 885/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126
[CV 5/5; 884/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=2, n estimators=84;, score=0.375 total
time=
      1.9s
[CV 3/5; 885/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126
[CV 3/5; 884/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=2, n estimators=84;, score=0.348 total
```

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time=
        1.9s
[CV 2/5; 884/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=2, n estimators=84;, score=0.362 total
      1.9s
[CV 4/5; 885/1000] START bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=126
[CV 5/5; 885/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126
[CV 2/5; 883/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.406 total
time=
       2.3s
[CV 1/5; 886/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30
[CV 1/5; 886/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30;, score=0.414 total
time=
      0.3s
[CV 2/5; 886/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30
[CV 3/5; 883/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=3, min samples split=4, n estimators=194;, score=0.382 total
time=
       2.6s
[CV 3/5; 886/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30
[CV 1/5; 883/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.399 total
time=
       2.7s
[CV 4/5; 883/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.394 total
[CV 4/5; 886/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30
[CV 5/5; 886/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30
[CV 5/5; 883/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=3, min samples split=4, n estimators=194;, score=0.387 total
time=
       2.7s
[CV 1/5; 887/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188
[CV 2/5; 886/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30;, score=0.416 total
time=
      0.3s
[CV 2/5; 887/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188
[CV 4/5; 886/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30;, score=0.407 total
[CV 3/5; 887/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188
```

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[CV 5/5; 886/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=30;, score=0.373 total
time=
      0.3s
[CV 4/5; 887/1000] START bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=7, n estimators=188
[CV 3/5; 886/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=8, n estimators=30;, score=0.401 total
time= 0.4s
[CV 5/5; 887/1000] START bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188
[CV 1/5; 885/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126;, score=0.396 total
time=
       2.1s
[CV 1/5; 888/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=160
[CV 2/5; 885/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126;, score=0.378 total
       2.0s
[CV 2/5; 888/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=160
[CV 4/5; 885/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=126;, score=0.344 total
time=
      2.0s
[CV 3/5; 888/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=160
[CV 3/5; 885/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126;, score=0.356 total
time=
       2.0s
[CV 4/5; 888/1000] START bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=160
[CV 5/5; 885/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=126;, score=0.365 total
time=
      2.1s
[CV 5/5; 888/1000] START bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=160
[CV 1/5; 888/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=160;, score=0.406 total
time=
      1.5s
[CV 1/5; 889/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=22
[CV 2/5; 888/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=160;, score=0.404 total
[CV 2/5; 889/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=22
[CV 4/5; 888/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=160;, score=0.401 total
time=
      1.4s
```

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[CV 3/5; 889/1000] START bootstrap=True, max_depth=13, max_features=None, min_samples_leaf=3, min_samples_split=6, n_estimators=22
```

- [CV 5/5; 888/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=160;, score=0.381 total time= 1.4s
- [CV 4/5; 889/1000] START bootstrap=True, max\_depth=13, max\_features=None, min samples leaf=3, min samples split=6, n estimators=22
- [CV 3/5; 888/1000] END bootstrap=True, max\_depth=16, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=160;, score=0.379 total time= 1.5s
- [CV 5/5; 889/1000] START bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22
- [CV 1/5; 889/1000] END bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22;, score=0.434 total time= 0.4s
- [CV 1/5; 890/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56
- [CV 2/5; 889/1000] END bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22;, score=0.407 total time= 0.3s
- [CV 2/5; 890/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56
- [CV 3/5; 889/1000] END bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22;, score=0.391 total time= 0.3s
- [CV 3/5; 890/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56
- [CV 4/5; 889/1000] END bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22;, score=0.404 total time= 0.3s
- [CV 4/5; 890/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56
- [CV 5/5; 889/1000] END bootstrap=True, max\_depth=13, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=22;, score=0.382 total time= 0.3s
- [CV 5/5; 890/1000] START bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56
- [CV 1/5; 890/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56;, score=0.363 total time= 0.9s
- [CV 1/5; 891/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=160
- [CV 4/5; 890/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=56;, score=0.359 total time= 0.8s
- [CV 2/5; 891/1000] START bootstrap=True, max\_depth=16, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=160
- [CV 2/5; 890/1000] END bootstrap=False, max\_depth=None, max\_features=sqrt,

```
min samples leaf=3, min samples split=2, n estimators=56;, score=0.392 total
time=
      1.0s
[CV 3/5; 891/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160
[CV 3/5; 890/1000] END bootstrap=False, max depth=None, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=56;, score=0.378 total
time= 1.0s
[CV 4/5; 891/1000] START bootstrap=True, max_depth=16, max_features=None,
min samples leaf=1, min samples split=2, n estimators=160
[CV 5/5; 890/1000] END bootstrap=False, max_depth=None, max_features=sqrt,
min samples leaf=3, min samples split=2, n estimators=56;, score=0.381 total
       1.0s
time=
[CV 5/5; 891/1000] START bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160
[CV 4/5; 887/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188;, score=0.346 total
time=
       4.0s
[CV 1/5; 892/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 1/5; 887/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188;, score=0.393 total
time= 4.6s
[CV 2/5; 892/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 2/5; 887/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188;, score=0.373 total
time=
      4.6s
[CV 3/5; 892/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 5/5; 887/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188;, score=0.392 total
[CV 4/5; 892/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 3/5; 887/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=188;, score=0.343 total
time= 4.6s
[CV 5/5; 892/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32
[CV 1/5; 892/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32;, score=0.380 total
time=
      0.8s
[CV 1/5; 893/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 2/5; 892/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=4, n estimators=32;, score=0.387 total
```

[CV 2/5; 893/1000] START bootstrap=True, max depth=11, max features=None,

time=

0.8s

```
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 4/5; 892/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=4, n estimators=32;, score=0.331 total
time= 0.8s
[CV 3/5; 893/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=2, min samples split=7, n estimators=144
[CV 3/5; 892/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32;, score=0.332 total
time=
      0.8s
[CV 4/5; 893/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 5/5; 892/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=32;, score=0.359 total
time=
       0.8s
[CV 5/5; 893/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 2/5; 891/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160;, score=0.389 total
time=
      2.3s
[CV 1/5; 894/1000] START bootstrap=False, max depth=15, max features=None,
min samples leaf=3, min samples split=4, n estimators=10
[CV 3/5; 891/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160;, score=0.367 total
time=
       2.3s
[CV 2/5; 894/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 1/5; 894/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.398 total
[CV 3/5; 894/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 2/5; 894/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.376 total
time=
      0.2s
[CV 4/5; 894/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 1/5; 891/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160;, score=0.405 total
time=
       2.6s
[CV 5/5; 894/1000] START bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=10
[CV 4/5; 891/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160;, score=0.357 total
time=
       2.6s
[CV 1/5; 895/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40
[CV 3/5; 894/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.340 total
```

```
0.2s
time=
[CV 2/5; 895/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40
[CV 4/5; 894/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=3, min samples split=4, n estimators=10;, score=0.344 total
time=
       0.2s
[CV 3/5; 895/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40
[CV 5/5; 891/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=160;, score=0.382 total
time=
       2.6s
[CV 4/5; 895/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40
[CV 5/5; 894/1000] END bootstrap=False, max_depth=15, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=10;, score=0.389 total
time=
      0.2s
[CV 5/5; 895/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40
[CV 1/5; 893/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=2, min samples split=7, n estimators=144;, score=0.418 total
time=
      1.9s
[CV 1/5; 896/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60
[CV 2/5; 895/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40;, score=0.362 total
time=
       0.6s
[CV 2/5; 896/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60
[CV 3/5; 895/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40;, score=0.369 total
time=
      0.6s
[CV 3/5; 896/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60
[CV 1/5; 895/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=40;, score=0.398 total
time= 0.7s
[CV 4/5; 896/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60
[CV 2/5; 893/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.404 total
time=
      1.9s
[CV 5/5; 896/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60
[CV 4/5; 895/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=40;, score=0.357 total
[CV 1/5; 897/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
```

min\_samples\_leaf=2, min\_samples\_split=9, n\_estimators=30

```
[CV 1/5; 896/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60;, score=0.406 total
time=
      0.4s
[CV 2/5; 897/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30
[CV 5/5; 895/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=40;, score=0.373 total
time=
      0.6s
[CV 3/5; 897/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=30
[CV 3/5; 893/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.391 total
time=
      1.9s
[CV 4/5; 893/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.394 total
time=
      1.8s
[CV 4/5; 897/1000] START bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=30
[CV 5/5; 897/1000] START bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30
[CV 5/5; 893/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=2, min samples split=7, n estimators=144;, score=0.389 total
time=
      1.8s
[CV 1/5; 898/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160
[CV 2/5; 896/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=60;, score=0.401 total
time=
       0.3s
[CV 2/5; 898/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160
[CV 3/5; 896/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60;, score=0.357 total
time=
      0.3s
[CV 3/5; 898/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=160
[CV 1/5; 897/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30;, score=0.405 total
time=
      0.3s
[CV 4/5; 898/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160
[CV 5/5; 897/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30;, score=0.419 total
      0.2s
[CV 5/5; 898/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160
[CV 4/5; 896/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60;, score=0.381 total
time=
       0.4s
```

```
[CV 1/5; 899/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 3/5; 897/1000] END bootstrap=True, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=30;, score=0.379 total
time= 0.3s
[CV 2/5; 899/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=172
[CV 2/5; 897/1000] END bootstrap=True, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30;, score=0.414 total
time=
      0.3s
[CV 3/5; 899/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 4/5; 897/1000] END bootstrap=True, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=30;, score=0.384 total
[CV 4/5; 899/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172
[CV 5/5; 896/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=60;, score=0.413 total
time=
      0.4s
[CV 5/5; 899/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=2, min samples split=8, n estimators=172
[CV 3/5; 898/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160;, score=0.379 total
time= 0.7s
[CV 1/5; 900/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 1/5; 898/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160;, score=0.424 total
time=
      0.8s
[CV 2/5; 900/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 2/5; 898/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160;, score=0.403 total
time= 0.9s
[CV 3/5; 900/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=64
[CV 5/5; 898/1000] END bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160;, score=0.387 total
time=
      0.8s
[CV 4/5; 900/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 4/5; 898/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=160;, score=0.397 total
time=
       0.8s
[CV 5/5; 900/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64
[CV 1/5; 900/1000] END bootstrap=True, max depth=10, max features=sqrt,
```

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min samples leaf=1, min samples split=3, n estimators=64;, score=0.406 total
time=
      0.4s
[CV 1/5; 901/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12
[CV 2/5; 900/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.400 total
time= 0.4s
[CV 2/5; 901/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12
[CV 3/5; 900/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=64;, score=0.367 total
       0.4s
time=
[CV 3/5; 901/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12
[CV 4/5; 900/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=1, min samples split=3, n estimators=64;, score=0.394 total
time=
      0.4s
[CV 4/5; 901/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12
[CV 5/5; 900/1000] END bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=64;, score=0.394 total
time= 0.4s
[CV 5/5; 901/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12
[CV 1/5; 899/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.408 total
time=
      1.3s
[CV 1/5; 902/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 3/5; 899/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.379 total
      1.3s
[CV 2/5; 902/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 5/5; 899/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.398 total
time= 1.3s
[CV 3/5; 902/1000] START bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 2/5; 899/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.416 total
      1.4s
time=
[CV 4/5; 902/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 4/5; 899/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=172;, score=0.410 total
time=
      1.4s
[CV 5/5; 902/1000] START bootstrap=False, max_depth=19, max_features=sqrt,
```

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min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 1/5; 901/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12;, score=0.389 total
time= 0.3s
[CV 1/5; 903/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=170
[CV 2/5; 901/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12;, score=0.373 total
time=
      0.3s
[CV 2/5; 903/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170
[CV 3/5; 901/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12;, score=0.360 total
time=
       0.3s
[CV 3/5; 903/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170
[CV 4/5; 901/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=4, n estimators=12;, score=0.384 total
time=
      0.3s
[CV 4/5; 903/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=170
[CV 5/5; 901/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=12;, score=0.363 total
time=
      0.3s
[CV 5/5; 903/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170
[CV 1/5; 902/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.379 total
[CV 1/5; 904/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54
[CV 2/5; 902/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.379 total
time=
      0.3s
[CV 2/5; 904/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54
[CV 3/5; 902/1000] END bootstrap=False, max depth=19, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20;, score=0.346 total
time= 0.3s
[CV 3/5; 904/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54
[CV 4/5; 902/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.372 total
time=
      0.3s
[CV 5/5; 902/1000] END bootstrap=False, max_depth=19, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.378 total
time=
       0.3s
```

[CV 4/5; 904/1000] START bootstrap=False, max\_depth=13, max\_features=None,

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min_samples_leaf=3, min_samples_split=6, n_estimators=54
[CV 5/5; 904/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54
[CV 1/5; 904/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=6, n estimators=54;, score=0.392 total
time=
        1.0s
[CV 1/5; 905/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116
[CV 2/5; 904/1000] END bootstrap=False, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54;, score=0.362 total
time=
      1.3s
[CV 2/5; 905/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116
[CV 3/5; 904/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54;, score=0.348 total
time=
      1.3s
[CV 3/5; 905/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116
[CV 4/5; 904/1000] END bootstrap=False, max_depth=13, max_features=None,
min samples leaf=3, min samples split=6, n estimators=54;, score=0.372 total
time=
      1.2s
[CV 4/5; 905/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116
[CV 5/5; 903/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170;, score=0.376 total
time=
       1.4s
[CV 5/5; 905/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116
[CV 5/5; 904/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=54;, score=0.376 total
time=
       1.2s
[CV 1/5; 906/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48
[CV 2/5; 903/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=170;, score=0.389 total
time=
      1.5s
[CV 2/5; 906/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48
[CV 1/5; 903/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170;, score=0.393 total
time=
      1.6s
[CV 3/5; 906/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48
[CV 4/5; 903/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170;, score=0.397 total
[CV 4/5; 906/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48
```

```
[CV 3/5; 903/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=170;, score=0.387 total
time=
      1.5s
[CV 5/5; 906/1000] START bootstrap=True, max_depth=9, max_features=None,
min samples leaf=1, min samples split=3, n estimators=48
[CV 1/5; 906/1000] END bootstrap=True, max depth=9, max features=None,
min samples leaf=1, min samples split=3, n estimators=48;, score=0.424 total
time=
      0.6s
[CV 1/5; 907/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 2/5; 906/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=1, min samples split=3, n estimators=48;, score=0.403 total
time=
      0.5s
[CV 2/5; 907/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 5/5; 906/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48;, score=0.388 total
      0.5s
[CV 3/5; 907/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=68
[CV 3/5; 906/1000] END bootstrap=True, max depth=9, max features=None,
min samples leaf=1, min samples split=3, n estimators=48;, score=0.387 total
time= 0.5s
[CV 4/5; 907/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 1/5; 905/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116;, score=0.395 total
time=
      1.0s
[CV 5/5; 907/1000] START bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68
[CV 4/5; 906/1000] END bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=48;, score=0.382 total
time=
      0.6s
[CV 1/5; 908/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182
[CV 5/5; 905/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=116;, score=0.391 total
time=
      0.9s
[CV 2/5; 908/1000] START bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 2/5; 905/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116;, score=0.407 total
      1.0s
[CV 3/5; 908/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 4/5; 905/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116;, score=0.395 total
time=
       1.0s
```

```
[CV 4/5; 908/1000] START bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 3/5; 905/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=116;, score=0.369 total
time= 1.1s
[CV 5/5; 908/1000] START bootstrap=True, max depth=11, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182
[CV 3/5; 907/1000] END bootstrap=False, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=8, n estimators=68;, score=0.363 total
time=
      0.8s
[CV 1/5; 909/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86
[CV 2/5; 907/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=68;, score=0.401 total
[CV 2/5; 909/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86
[CV 5/5; 907/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68;, score=0.382 total
time=
      0.8s
[CV 3/5; 909/1000] START bootstrap=True, max_depth=6, max_features=None,
min samples leaf=2, min samples split=4, n estimators=86
[CV 4/5; 907/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=68;, score=0.385 total
time= 0.8s
[CV 4/5; 909/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86
[CV 1/5; 907/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=68;, score=0.386 total
time=
      0.9s
[CV 5/5; 909/1000] START bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86
[CV 1/5; 909/1000] END bootstrap=True, max_depth=6, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86;, score=0.417 total
time=
      0.6s
[CV 1/5; 910/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=2, n estimators=124
[CV 1/5; 908/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.396 total
time=
      1.4s
[CV 2/5; 910/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124
[CV 5/5; 909/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=2, min samples split=4, n estimators=86;, score=0.401 total
time=
       0.6s
[CV 3/5; 910/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124
[CV 2/5; 909/1000] END bootstrap=True, max_depth=6, max_features=None,
```

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min samples leaf=2, min samples split=4, n estimators=86;, score=0.416 total
time=
      0.7s
[CV 4/5; 910/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124
[CV 3/5; 909/1000] END bootstrap=True, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=86;, score=0.389 total
time= 0.7s
[CV 5/5; 910/1000] START bootstrap=True, max depth=10, max features=None,
min samples leaf=3, min samples split=2, n estimators=124
[CV 4/5; 909/1000] END bootstrap=True, max_depth=6, max_features=None,
min samples leaf=2, min samples split=4, n estimators=86;, score=0.387 total
      0.7s
time=
[CV 1/5; 911/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122
[CV 2/5; 908/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.425 total
time=
      1.3s
[CV 2/5; 911/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122
[CV 3/5; 908/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.370 total
time= 1.3s
[CV 3/5; 911/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122
[CV 4/5; 908/1000] END bootstrap=True, max_depth=11, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.413 total
time=
      1.3s
[CV 4/5; 911/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122
[CV 5/5; 908/1000] END bootstrap=True, max depth=11, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.392 total
time= 1.4s
[CV 5/5; 911/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122
[CV 1/5; 910/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124;, score=0.404 total
time= 1.3s
[CV 1/5; 912/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=82
[CV 2/5; 910/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124;, score=0.408 total
      1.5s
time=
[CV 2/5; 912/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=82
[CV 3/5; 910/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124;, score=0.401 total
time=
      1.5s
```

[CV 4/5; 910/1000] END bootstrap=True, max depth=10, max features=None,

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min_samples_leaf=3, min_samples_split=2, n_estimators=124;, score=0.401 total
time=
      1.5s
[CV 3/5; 912/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=82
[CV 4/5; 912/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=9, n estimators=82
[CV 5/5; 910/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=124;, score=0.400 total
time=
      1.5s
[CV 5/5; 912/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=82
[CV 1/5; 912/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=82;, score=0.423 total
time=
       0.8s
[CV 1/5; 913/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 3/5; 912/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=82;, score=0.401 total
time=
      0.7s
[CV 2/5; 913/1000] START bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=9, n estimators=114
[CV 2/5; 912/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=82;, score=0.394 total
time=
      0.8s
[CV 3/5; 913/1000] START bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 5/5; 912/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=82;, score=0.401 total
[CV 4/5; 913/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114
[CV 4/5; 912/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=9, n estimators=82;, score=0.401 total
time=
      0.9s
[CV 5/5; 913/1000] START bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=9, n estimators=114
[CV 1/5; 911/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122;, score=0.382 total
time=
       2.9s
[CV 1/5; 914/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114
[CV 4/5; 911/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122;, score=0.337 total
time=
       2.8s
[CV 2/5; 914/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114
[CV 2/5; 911/1000] END bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122;, score=0.372 total
```

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time=
        2.9s
[CV 3/5; 914/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114
[CV 3/5; 911/1000] END bootstrap=False, max_depth=14, max_features=None,
min samples leaf=3, min samples split=2, n estimators=122;, score=0.346 total
time=
        2.9s
[CV 4/5; 914/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114
[CV 5/5; 911/1000] END bootstrap=False, max depth=14, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=122;, score=0.369 total
time=
       2.9s
[CV 5/5; 914/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114
[CV 1/5; 913/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.414 total
time=
      1.6s
[CV 1/5; 915/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 2/5; 913/1000] END bootstrap=True, max_depth=13, max_features=None,
min samples leaf=1, min samples split=9, n estimators=114;, score=0.388 total
time=
      1.4s
[CV 2/5; 915/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 1/5; 914/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114;, score=0.411 total
time=
       0.7s
[CV 3/5; 915/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 2/5; 914/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114;, score=0.397 total
      0.7s
time=
[CV 4/5; 915/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 3/5; 914/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=114;, score=0.397 total
time= 0.7s
[CV 5/5; 915/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92
[CV 4/5; 914/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114;, score=0.404 total
time=
      0.7s
[CV 1/5; 916/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 3/5; 913/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.398 total
[CV 2/5; 916/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
```

```
[CV 5/5; 914/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=114;, score=0.404 total
time=
      0.8s
[CV 3/5; 916/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min samples leaf=2, min samples split=9, n estimators=88
[CV 4/5; 913/1000] END bootstrap=True, max depth=13, max features=None,
min samples leaf=1, min samples split=9, n estimators=114;, score=0.401 total
time=
      1.6s
[CV 4/5; 916/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 5/5; 913/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=114;, score=0.391 total
time=
      1.7s
[CV 5/5; 916/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88
[CV 1/5; 916/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88;, score=0.405 total
      0.7s
[CV 1/5; 917/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=158
[CV 2/5; 916/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=88;, score=0.400 total
time=
      0.7s
[CV 2/5; 917/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158
[CV 3/5; 916/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=88;, score=0.373 total
time=
      0.7s
[CV 3/5; 917/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158
[CV 4/5; 916/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=2, min_samples_split=9, n_estimators=88;, score=0.410 total
time=
      0.7s
[CV 4/5; 917/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=158
[CV 5/5; 916/1000] END bootstrap=True, max depth=12, max features=sqrt,
min samples leaf=2, min samples split=9, n estimators=88;, score=0.391 total
time=
      0.8s
[CV 5/5; 917/1000] START bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158
[CV 2/5; 915/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=1, min samples split=4, n estimators=92;, score=0.362 total
[CV 1/5; 917/1000] END bootstrap=True, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158;, score=0.415 total
[CV 1/5; 918/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
```

min\_samples\_leaf=3, min\_samples\_split=5, n\_estimators=18

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[CV 2/5; 918/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=18
[CV 1/5; 915/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.377 total
time= 1.6s
[CV 3/5; 918/1000] START bootstrap=False, max depth=12, max features=sqrt,
min samples leaf=3, min samples split=5, n estimators=18
[CV 2/5; 917/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=158;, score=0.420 total
time=
      0.7s
[CV 4/5; 918/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=18
[CV 4/5; 915/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=1, min samples split=4, n estimators=92;, score=0.347 total
[CV 5/5; 918/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=18
[CV 2/5; 918/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=18;, score=0.376 total
time=
      0.2s
[CV 1/5; 919/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=190
[CV 5/5; 915/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.365 total
time= 1.6s
[CV 2/5; 919/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190
[CV 1/5; 918/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=18;, score=0.417 total
time=
      0.2s
[CV 3/5; 919/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190
[CV 3/5; 915/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=92;, score=0.344 total
time=
      1.7s
[CV 4/5; 919/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=190
[CV 4/5; 917/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158;, score=0.391 total
time=
      0.7s
[CV 5/5; 919/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190
[CV 3/5; 917/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158;, score=0.385 total
time=
       0.7s
[CV 1/5; 920/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146
[CV 3/5; 918/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
```

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min samples leaf=3, min samples split=5, n estimators=18;, score=0.365 total
time=
      0.2s
[CV 2/5; 920/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146
[CV 4/5; 918/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=18;, score=0.378 total
time= 0.2s
[CV 3/5; 920/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=6, n estimators=146
[CV 5/5; 918/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=5, n estimators=18;, score=0.384 total
       0.2s
[CV 4/5; 920/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146
[CV 5/5; 917/1000] END bootstrap=True, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=158;, score=0.387 total
time=
      0.7s
[CV 5/5; 920/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146
[CV 1/5; 919/1000] END bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190;, score=0.412 total
time= 1.1s
[CV 1/5; 921/1000] START bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=2, n estimators=36
[CV 4/5; 919/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190;, score=0.387 total
time=
      1.2s
[CV 2/5; 921/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36
[CV 5/5; 919/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190;, score=0.413 total
time= 1.2s
[CV 3/5; 921/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36
[CV 3/5; 919/1000] END bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190;, score=0.407 total
time= 1.2s
[CV 4/5; 921/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36
[CV 2/5; 919/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=190;, score=0.410 total
time=
      1.3s
[CV 5/5; 921/1000] START bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36
[CV 1/5; 920/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146;, score=0.409 total
time=
      1.9s
```

[CV 1/5; 922/1000] START bootstrap=False, max\_depth=13, max\_features=None,

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min_samples_leaf=2, min_samples_split=5, n_estimators=144
[CV 4/5; 920/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146;, score=0.378 total
      1.8s
[CV 2/5; 922/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=5, n estimators=144
[CV 2/5; 920/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146;, score=0.394 total
time=
      1.9s
[CV 3/5; 922/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144
[CV 3/5; 920/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146;, score=0.347 total
time=
      1.9s
[CV 4/5; 922/1000] START bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144
[CV 5/5; 920/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=146;, score=0.379 total
time=
      2.0s
[CV 5/5; 922/1000] START bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=5, n estimators=144
[CV 4/5; 921/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36;, score=0.362 total
time=
      1.0s
[CV 1/5; 923/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=30
[CV 1/5; 921/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=2, n estimators=36;, score=0.332 total
[CV 2/5; 923/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=30
[CV 3/5; 921/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=2, n estimators=36;, score=0.357 total
time=
      1.2s
[CV 3/5; 923/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=30
[CV 2/5; 921/1000] END bootstrap=False, max depth=None, max features=None,
min_samples_leaf=2, min_samples_split=2, n_estimators=36;, score=0.329 total
time= 1.2s
[CV 4/5; 923/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=30
[CV 5/5; 921/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=2, min samples split=2, n estimators=36;, score=0.335 total
time=
      1.1s
[CV 5/5; 923/1000] START bootstrap=False, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=30
[CV 1/5; 923/1000] END bootstrap=False, max_depth=18, max_features=None,
min samples leaf=3, min samples split=2, n estimators=30;, score=0.379 total
```

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time= 0.7s
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- [CV 1/5; 924/1000] START bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42
- [CV 2/5; 923/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=30;, score=0.367 total time= 0.8s
- [CV 2/5; 924/1000] START bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42
- [CV 4/5; 923/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=30;, score=0.328 total time= 0.8s
- [CV 3/5; 924/1000] START bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42
- [CV 3/5; 923/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=30;, score=0.337 total time= 0.8s
- [CV 4/5; 924/1000] START bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42
- [CV 5/5; 923/1000] END bootstrap=False, max\_depth=18, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=30;, score=0.366 total time= 0.8s
- [CV 5/5; 924/1000] START bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42
- [CV 1/5; 924/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42;, score=0.411 total time= 0.6s
- [CV 1/5; 925/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples leaf=3, min\_samples split=7, n\_estimators=64
- [CV 2/5; 924/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42;, score=0.387 total time= 0.6s
- [CV 2/5; 925/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples leaf=3, min\_samples split=7, n\_estimators=64
- [CV 3/5; 924/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42;, score=0.388 total time= 0.6s
- [CV 3/5; 925/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=64
- [CV 4/5; 924/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42;, score=0.389 total time= 0.6s
- [CV 4/5; 925/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=64
- [CV 5/5; 924/1000] END bootstrap=True, max\_depth=12, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=42;, score=0.384 total time= 0.6s
- [CV 5/5; 925/1000] START bootstrap=False, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=7, n\_estimators=64

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[CV 2/5; 922/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144;, score=0.354 total
time=
       3.0s
[CV 1/5; 926/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=162
[CV 1/5; 922/1000] END bootstrap=False, max depth=13, max features=None,
min samples leaf=2, min samples split=5, n estimators=144;, score=0.395 total
time=
       3.1s
[CV 2/5; 926/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162
[CV 4/5; 922/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144;, score=0.372 total
time=
       3.1s
[CV 3/5; 926/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162
[CV 3/5; 922/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144;, score=0.350 total
      3.3s
[CV 4/5; 926/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=3, min samples split=4, n estimators=162
[CV 5/5; 925/1000] END bootstrap=False, max depth=None, max features=None,
min samples leaf=3, min samples split=7, n estimators=64;, score=0.353 total
time=
      1.5s
[CV 5/5; 926/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162
[CV 5/5; 922/1000] END bootstrap=False, max_depth=13, max_features=None,
min_samples_leaf=2, min_samples_split=5, n_estimators=144;, score=0.363 total
time=
       3.3s
[CV 1/5; 927/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78
[CV 4/5; 925/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=64;, score=0.344 total
time=
      1.7s
[CV 2/5; 927/1000] START bootstrap=True, max depth=7, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=78
[CV 1/5; 925/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=7, n estimators=64;, score=0.338 total
time=
       2.1s
[CV 3/5; 927/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78
[CV 2/5; 925/1000] END bootstrap=False, max_depth=None, max_features=None,
min samples leaf=3, min samples split=7, n estimators=64;, score=0.338 total
[CV 4/5; 927/1000] START bootstrap=True, max depth=7, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78
[CV 3/5; 925/1000] END bootstrap=False, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=64;, score=0.353 total
time=
       2.0s
```

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[CV 5/5; 927/1000] START bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78
[CV 2/5; 927/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78;, score=0.419 total
time= 0.4s
[CV 1/5; 928/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=2, n estimators=184
[CV 1/5; 927/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=78;, score=0.425 total
time=
      0.4s
[CV 2/5; 928/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184
[CV 3/5; 927/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min samples leaf=1, min samples split=5, n estimators=78;, score=0.387 total
[CV 3/5; 928/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184
[CV 4/5; 927/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78;, score=0.384 total
time=
      0.4s
[CV 4/5; 928/1000] START bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=2, n estimators=184
[CV 5/5; 927/1000] END bootstrap=True, max_depth=7, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=78;, score=0.397 total
time= 0.4s
[CV 5/5; 928/1000] START bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184
[CV 1/5; 926/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162;, score=0.396 total
time=
       2.4s
[CV 1/5; 929/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176
[CV 2/5; 926/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162;, score=0.395 total
time=
      2.4s
[CV 2/5; 929/1000] START bootstrap=True, max depth=11, max features=None,
min samples leaf=3, min samples split=9, n estimators=176
[CV 1/5; 928/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184;, score=0.406 total
time=
      1.9s
[CV 3/5; 929/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176
[CV 5/5; 926/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162;, score=0.384 total
time=
       2.5s
[CV 4/5; 929/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176
[CV 4/5; 926/1000] END bootstrap=True, max depth=18, max features=None,
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min_samples_leaf=3, min_samples_split=4, n_estimators=162;, score=0.369 total
time=
       2.6s
[CV 5/5; 929/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176
[CV 2/5; 928/1000] END bootstrap=True, max depth=8, max features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184;, score=0.404 total
time= 2.0s
[CV 1/5; 930/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=8, n estimators=102
[CV 3/5; 928/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184;, score=0.394 total
       1.9s
time=
[CV 2/5; 930/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 3/5; 926/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=162;, score=0.379 total
time=
       2.8s
[CV 3/5; 930/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 5/5; 928/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=3, min samples split=2, n estimators=184;, score=0.392 total
time= 1.9s
[CV 4/5; 930/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 4/5; 928/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=184;, score=0.410 total
time=
      1.9s
[CV 5/5; 930/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102
[CV 1/5; 930/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.411 total
time= 0.9s
[CV 1/5; 931/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=48
[CV 5/5; 930/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.391 total
time= 0.7s
[CV 2/5; 931/1000] START bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=48
[CV 2/5; 930/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.401 total
      0.9s
time=
[CV 3/5; 931/1000] START bootstrap=True, max_depth=9, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=48
[CV 3/5; 930/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.375 total
time=
      0.9s
```

[CV 4/5; 931/1000] START bootstrap=True, max\_depth=9, max\_features=None,

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min_samples_leaf=3, min_samples_split=6, n_estimators=48
[CV 4/5; 930/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=8, n_estimators=102;, score=0.395 total
time= 0.9s
[CV 5/5; 931/1000] START bootstrap=True, max depth=9, max features=None,
min samples leaf=3, min samples split=6, n estimators=48
[CV 1/5; 931/1000] END bootstrap=True, max depth=9, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=48;, score=0.409 total
time=
      0.5s
[CV 1/5; 932/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=154
[CV 2/5; 931/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=48;, score=0.403 total
time=
       0.5s
[CV 2/5; 932/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=154
[CV 3/5; 931/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=48;, score=0.401 total
time=
      0.5s
[CV 3/5; 932/1000] START bootstrap=False, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=154
[CV 2/5; 929/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176;, score=0.417 total
time=
      2.0s
[CV 4/5; 932/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=154
[CV 4/5; 931/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=48;, score=0.400 total
[CV 5/5; 932/1000] START bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=154
[CV 5/5; 931/1000] END bootstrap=True, max_depth=9, max_features=None,
min samples leaf=3, min samples split=6, n estimators=48;, score=0.392 total
time=
      0.5s
[CV 1/5; 933/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=42
[CV 1/5; 929/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176;, score=0.401 total
time=
       2.2s
[CV 2/5; 933/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=42
[CV 3/5; 929/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176;, score=0.395 total
time=
       2.3s
[CV 3/5; 933/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=42
[CV 5/5; 929/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=176;, score=0.385 total
```

time= 2.2s[CV 4/5; 933/1000] START bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42 [CV 4/5; 929/1000] END bootstrap=True, max\_depth=11, max\_features=None, min samples leaf=3, min samples split=9, n estimators=176;, score=0.406 total 2.2s time= [CV 5/5; 933/1000] START bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42 [CV 1/5; 933/1000] END bootstrap=False, max depth=16, max features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42;, score=0.380 total time= 1.1s [CV 1/5; 934/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=82 [CV 2/5; 933/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42;, score=0.387 total time= 1.0s [CV 2/5; 934/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=82 [CV 3/5; 933/1000] END bootstrap=False, max\_depth=16, max\_features=None, min samples leaf=3, min samples split=2, n estimators=42;, score=0.332 total time= 1.1s[CV 3/5; 934/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=82 [CV 4/5; 933/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42;, score=0.334 total time= 1.0s [CV 4/5; 934/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=82 [CV 5/5; 933/1000] END bootstrap=False, max\_depth=16, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=2, n\_estimators=42;, score=0.359 total time= 1.1s[CV 5/5; 934/1000] START bootstrap=True, max depth=14, max features=None, min\_samples\_leaf=1, min\_samples\_split=9, n\_estimators=82 [CV 2/5; 932/1000] END bootstrap=False, max\_depth=15, max\_features=sqrt, min samples leaf=2, min samples split=8, n estimators=154;, score=0.388 total time= 2.0s [CV 1/5; 935/1000] START bootstrap=True, max depth=None, max features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=94 [CV 3/5; 932/1000] END bootstrap=False, max\_depth=15, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=154;, score=0.367 total time= 2.0s [CV 2/5; 935/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt, min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=94 [CV 4/5; 932/1000] END bootstrap=False, max\_depth=15, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=154;, score=0.387 total [CV 3/5; 935/1000] START bootstrap=True, max\_depth=None, max\_features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=6, n\_estimators=94

```
[CV 1/5; 932/1000] END bootstrap=False, max_depth=15, max_features=sqrt,
min_samples_leaf=2, min_samples_split=8, n_estimators=154;, score=0.406 total
time=
       2.1s
[CV 4/5; 935/1000] START bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94
[CV 5/5; 932/1000] END bootstrap=False, max depth=15, max features=sqrt,
min samples leaf=2, min samples split=8, n estimators=154;, score=0.375 total
time=
       2.0s
[CV 5/5; 935/1000] START bootstrap=True, max depth=None, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94
[CV 2/5; 934/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=9, n estimators=82;, score=0.408 total
time=
      1.1s
[CV 1/5; 936/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 1/5; 934/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=82;, score=0.414 total
      1.2s
[CV 2/5; 936/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182
[CV 2/5; 935/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.391 total
time= 0.9s
[CV 3/5; 936/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 1/5; 935/1000] END bootstrap=True, max depth=None, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.387 total
time=
      1.0s
[CV 4/5; 936/1000] START bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 4/5; 934/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=82;, score=0.395 total
time=
      1.2s
[CV 5/5; 936/1000] START bootstrap=False, max_depth=12, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182
[CV 3/5; 934/1000] END bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=9, n estimators=82;, score=0.384 total
time=
      1.2s
[CV 1/5; 937/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100
[CV 4/5; 935/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.362 total
      1.0s
[CV 2/5; 937/1000] START bootstrap=True, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100
[CV 5/5; 935/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=94;, score=0.401 total
```

time=

1.0s

```
[CV 3/5; 937/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100
[CV 5/5; 934/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=82;, score=0.384 total
time= 1.2s
[CV 4/5; 937/1000] START bootstrap=True, max depth=9, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=100
[CV 3/5; 935/1000] END bootstrap=True, max_depth=None, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=94;, score=0.365 total
time=
      1.1s
[CV 5/5; 937/1000] START bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100
[CV 1/5; 937/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100;, score=0.421 total
[CV 1/5; 938/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=56
[CV 3/5; 937/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100;, score=0.397 total
time=
      0.7s
[CV 2/5; 938/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=9, n estimators=56
[CV 2/5; 937/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=100;, score=0.403 total
time= 0.7s
[CV 3/5; 938/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=56
[CV 4/5; 937/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100;, score=0.403 total
time=
      0.7s
[CV 4/5; 938/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=56
[CV 5/5; 937/1000] END bootstrap=True, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=100;, score=0.404 total
time=
      0.7s
[CV 5/5; 938/1000] START bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=9, n estimators=56
[CV 1/5; 936/1000] END bootstrap=False, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.405 total
time=
      1.9s
[CV 1/5; 939/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164
[CV 1/5; 938/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=9, n estimators=56;, score=0.399 total
time=
       0.9s
[CV 2/5; 939/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164
[CV 2/5; 936/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
```

```
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.387 total
time=
       2.1s
[CV 3/5; 939/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164
[CV 2/5; 938/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=56;, score=0.406 total
time= 0.9s
[CV 4/5; 939/1000] START bootstrap=True, max depth=14, max features=None,
min samples leaf=1, min samples split=3, n estimators=164
[CV 3/5; 938/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=3, min samples split=9, n estimators=56;, score=0.388 total
       0.9s
time=
[CV 5/5; 939/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164
[CV 4/5; 938/1000] END bootstrap=True, max depth=16, max features=None,
min samples leaf=3, min samples split=9, n estimators=56;, score=0.382 total
time=
       0.8s
[CV 1/5; 940/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42
[CV 5/5; 938/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=56;, score=0.394 total
time= 0.9s
[CV 2/5; 940/1000] START bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=9, n estimators=42
[CV 3/5; 936/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.363 total
time=
      2.0s
[CV 3/5; 940/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42
[CV 1/5; 940/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=9, n estimators=42;, score=0.431 total
time= 0.3s
[CV 4/5; 940/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42
[CV 2/5; 940/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42;, score=0.413 total
time= 0.3s
[CV 5/5; 940/1000] START bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42
[CV 4/5; 936/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.375 total
time=
       2.1s
[CV 5/5; 936/1000] END bootstrap=False, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.382 total
time=
        2.1s
[CV 1/5; 941/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 2/5; 941/1000] START bootstrap=False, max_depth=14, max_features=None,
```

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min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 3/5; 940/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=9, n estimators=42;, score=0.372 total
time= 0.4s
[CV 3/5; 941/1000] START bootstrap=False, max depth=14, max features=None,
min samples leaf=2, min samples split=6, n estimators=112
[CV 5/5; 940/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=42;, score=0.410 total
time=
      0.3s
[CV 4/5; 941/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 4/5; 940/1000] END bootstrap=True, max_depth=5, max_features=None,
min samples leaf=3, min samples split=9, n estimators=42;, score=0.387 total
time=
       0.3s
[CV 5/5; 941/1000] START bootstrap=False, max_depth=14, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 1/5; 939/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164;, score=0.402 total
time=
      2.5s
[CV 1/5; 942/1000] START bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=66
[CV 5/5; 939/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164;, score=0.387 total
time=
       2.2s
[CV 2/5; 942/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=66
[CV 2/5; 939/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164;, score=0.406 total
[CV 3/5; 942/1000] START bootstrap=True, max depth=10, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=66
[CV 4/5; 939/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164;, score=0.372 total
time=
       2.5s
[CV 4/5; 942/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=66
[CV 3/5; 939/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=164;, score=0.366 total
time=
       2.6s
[CV 5/5; 942/1000] START bootstrap=True, max_depth=10, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=66
[CV 1/5; 942/1000] END bootstrap=True, max depth=10, max features=sqrt,
min samples leaf=2, min samples split=2, n estimators=66;, score=0.415 total
time=
       0.5s
[CV 1/5; 943/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=76
[CV 2/5; 942/1000] END bootstrap=True, max_depth=10, max_features=sqrt,
min samples leaf=2, min samples split=2, n estimators=66;, score=0.398 total
```

0.4stime= [CV 2/5; 943/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=76 [CV 1/5; 941/1000] END bootstrap=False, max\_depth=14, max\_features=None, min samples leaf=2, min samples split=6, n estimators=112;, score=0.382 total time= 2.3s [CV 3/5; 943/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=76 [CV 3/5; 942/1000] END bootstrap=True, max depth=10, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=66;, score=0.392 total time= 0.5s[CV 4/5; 943/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=76 [CV 4/5; 942/1000] END bootstrap=True, max depth=10, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=66;, score=0.387 total time= 0.5s[CV 5/5; 943/1000] START bootstrap=False, max depth=6, max features=None, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=76 [CV 5/5; 942/1000] END bootstrap=True, max\_depth=10, max\_features=sqrt, min samples leaf=2, min samples split=2, n estimators=66;, score=0.387 total time= 0.4s[CV 1/5; 944/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122 [CV 2/5; 941/1000] END bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=112;, score=0.369 total time= 2.7s [CV 2/5; 944/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122 [CV 4/5; 941/1000] END bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=112;, score=0.347 total time= 2.6s [CV 3/5; 944/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122 [CV 5/5; 941/1000] END bootstrap=False, max\_depth=14, max\_features=None, min samples leaf=2, min samples split=6, n estimators=112;, score=0.360 total 2.6s time= [CV 4/5; 944/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122 [CV 3/5; 941/1000] END bootstrap=False, max\_depth=14, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=112;, score=0.338 total time= 2.9s [CV 5/5; 944/1000] START bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122 [CV 1/5; 944/1000] END bootstrap=False, max depth=5, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=4, n\_estimators=122;, score=0.405 total [CV 1/5; 945/1000] START bootstrap=True, max\_depth=6, max\_features=sqrt,

min\_samples\_leaf=1, min\_samples\_split=3, n\_estimators=184

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[CV 1/5; 943/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=76;, score=0.395 total
time=
      0.9s
[CV 2/5; 945/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=184
[CV 2/5; 943/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=4, n estimators=76;, score=0.387 total
time=
      0.9s
[CV 3/5; 945/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184
[CV 3/5; 943/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=4, n estimators=76;, score=0.334 total
time=
      0.9s
[CV 4/5; 945/1000] START bootstrap=True, max depth=6, max features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184
[CV 4/5; 943/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=76;, score=0.373 total
time= 0.9s
[CV 5/5; 945/1000] START bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=184
[CV 5/5; 943/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=2, min samples split=4, n estimators=76;, score=0.391 total
time= 0.9s
[CV 1/5; 946/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96
[CV 2/5; 944/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.403 total
time=
      0.7s
[CV 2/5; 946/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96
[CV 3/5; 944/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.353 total
time=
      0.7s
[CV 3/5; 946/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=96
[CV 4/5; 944/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=122;, score=0.388 total
time=
      0.7s
[CV 4/5; 946/1000] START bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96
[CV 5/5; 944/1000] END bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=122;, score=0.408 total
      0.7s
[CV 5/5; 946/1000] START bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96
[CV 1/5; 945/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184;, score=0.411 total
time=
       0.8s
```

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[CV 1/5; 947/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 3/5; 945/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184;, score=0.359 total
time= 0.9s
[CV 2/5; 947/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56
[CV 2/5; 945/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min samples leaf=1, min samples split=3, n estimators=184;, score=0.410 total
time=
      0.9s
[CV 3/5; 947/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 4/5; 945/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184;, score=0.389 total
       0.9s
[CV 4/5; 947/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56
[CV 5/5; 945/1000] END bootstrap=True, max_depth=6, max_features=sqrt,
min_samples_leaf=1, min_samples_split=3, n_estimators=184;, score=0.392 total
time=
      0.9s
[CV 5/5; 947/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56
[CV 1/5; 947/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56;, score=0.382 total
time= 0.8s
[CV 1/5; 948/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122
[CV 1/5; 946/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=96;, score=0.399 total
time=
      1.4s
[CV 2/5; 948/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122
[CV 2/5; 946/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96;, score=0.378 total
time= 1.5s
[CV 3/5; 947/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56;, score=0.350 total
time=
      0.8s
[CV 3/5; 948/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122
[CV 4/5; 948/1000] START bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122
[CV 2/5; 947/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56;, score=0.372 total
time=
       0.9s
[CV 5/5; 948/1000] START bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122
[CV 3/5; 946/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
```

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min samples leaf=1, min samples split=7, n estimators=96;, score=0.346 total
time=
      1.4s
[CV 1/5; 949/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 4/5; 946/1000] END bootstrap=False, max depth=16, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=96;, score=0.382 total
time= 1.3s
[CV 2/5; 949/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=144
[CV 5/5; 946/1000] END bootstrap=False, max_depth=16, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=96;, score=0.376 total
time=
       1.3s
[CV 3/5; 949/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 4/5; 947/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=56;, score=0.357 total
time=
      0.9s
[CV 4/5; 949/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144
[CV 5/5; 947/1000] END bootstrap=False, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=56;, score=0.369 total
time= 0.9s
[CV 5/5; 949/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=144
[CV 1/5; 948/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122;, score=0.399 total
time=
      0.8s
[CV 1/5; 950/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118
[CV 2/5; 948/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122;, score=0.406 total
time= 0.9s
[CV 2/5; 950/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118
[CV 5/5; 948/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122;, score=0.385 total
time= 0.9s
[CV 3/5; 950/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118
[CV 4/5; 948/1000] END bootstrap=True, max_depth=12, max_features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122;, score=0.406 total
      1.0s
time=
[CV 4/5; 950/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118
[CV 3/5; 948/1000] END bootstrap=True, max depth=12, max features=sqrt,
min_samples_leaf=3, min_samples_split=5, n_estimators=122;, score=0.391 total
time=
      1.0s
[CV 5/5; 950/1000] START bootstrap=False, max depth=5, max features=None,
```

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min_samples_leaf=3, min_samples_split=4, n_estimators=118
[CV 1/5; 949/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.408 total
      1.2s
[CV 1/5; 951/1000] START bootstrap=True, max depth=None, max features=None,
min samples leaf=1, min samples split=3, n estimators=76
[CV 2/5; 949/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.408 total
time=
      1.2s
[CV 2/5; 951/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 3/5; 949/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.379 total
time=
      1.1s
[CV 3/5; 951/1000] START bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 5/5; 949/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.385 total
time=
      1.1s
[CV 4/5; 949/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=144;, score=0.379 total
time= 1.1s
[CV 4/5; 951/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 5/5; 951/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76
[CV 1/5; 950/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118;, score=0.405 total
[CV 1/5; 952/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 2/5; 950/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118;, score=0.387 total
time=
      1.3s
[CV 2/5; 952/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 3/5; 950/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118;, score=0.398 total
time=
      1.2s
[CV 4/5; 950/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118;, score=0.367 total
time=
      1.2s
[CV 3/5; 952/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 4/5; 952/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 5/5; 950/1000] END bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=118;, score=0.395 total
```

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time=
        1.2s
[CV 5/5; 952/1000] START bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156
[CV 1/5; 951/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=3, n estimators=76;, score=0.358 total
time=
        1.3s
[CV 1/5; 953/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116
[CV 5/5; 951/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76;, score=0.375 total
time=
      1.2s
[CV 2/5; 953/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116
[CV 2/5; 951/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76;, score=0.406 total
time=
      1.3s
[CV 3/5; 953/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116
[CV 4/5; 951/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=1, min samples split=3, n estimators=76;, score=0.353 total
time=
      1.5s
[CV 4/5; 953/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116
[CV 3/5; 951/1000] END bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=76;, score=0.375 total
time=
       1.5s
[CV 5/5; 953/1000] START bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116
[CV 1/5; 952/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.396 total
time=
       1.8s
[CV 1/5; 954/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=32
[CV 2/5; 952/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min samples leaf=1, min samples split=4, n estimators=156;, score=0.389 total
      1.7s
time=
[CV 2/5; 954/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=32
[CV 2/5; 953/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116;, score=0.398 total
time=
      1.4s
[CV 3/5; 954/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=32
[CV 3/5; 952/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.357 total
[CV 4/5; 954/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=32
```

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[CV 5/5; 952/1000] END bootstrap=False, max_depth=11, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=156;, score=0.376 total
time=
      1.7s
[CV 5/5; 954/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=4, n estimators=32
[CV 4/5; 952/1000] END bootstrap=False, max depth=11, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=156;, score=0.384 total
time=
      1.8s
[CV 1/5; 955/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=66
[CV 3/5; 953/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116;, score=0.388 total
time=
      1.5s
[CV 2/5; 955/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=66
[CV 1/5; 953/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116;, score=0.411 total
      1.7s
[CV 3/5; 955/1000] START bootstrap=False, max_depth=19, max_features=None,
min samples leaf=2, min samples split=6, n estimators=66
[CV 1/5; 954/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=4, n estimators=32;, score=0.409 total
time= 0.4s
[CV 4/5; 955/1000] START bootstrap=False, max_depth=19, max_features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=66
[CV 2/5; 954/1000] END bootstrap=True, max depth=11, max features=None,
min samples leaf=1, min samples split=4, n estimators=32;, score=0.416 total
time=
      0.4s
[CV 5/5; 955/1000] START bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=66
[CV 3/5; 954/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=32;, score=0.400 total
time=
      0.5s
[CV 1/5; 956/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=38
[CV 4/5; 954/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=4, n estimators=32;, score=0.375 total
time=
      0.4s
[CV 2/5; 956/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=38
[CV 5/5; 954/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=4, n estimators=32;, score=0.372 total
      0.4s
[CV 3/5; 956/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=38
[CV 5/5; 953/1000] END bootstrap=True, max_depth=13, max_features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116;, score=0.388 total
time=
       1.7s
```

```
[CV 4/5; 956/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=38
[CV 4/5; 953/1000] END bootstrap=True, max depth=13, max features=None,
min_samples_leaf=3, min_samples_split=4, n_estimators=116;, score=0.394 total
time= 1.7s
[CV 5/5; 956/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=38
[CV 1/5; 956/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=38;, score=0.414 total
time=
      0.2s
[CV 1/5; 957/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 2/5; 956/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=38;, score=0.414 total
[CV 2/5; 957/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 3/5; 956/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=38;, score=0.401 total
time=
      0.2s
[CV 3/5; 957/1000] START bootstrap=False, max depth=12, max features=None,
min samples leaf=3, min samples split=9, n estimators=22
[CV 4/5; 956/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=38;, score=0.392 total
time= 0.2s
[CV 4/5; 957/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 5/5; 956/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=38;, score=0.406 total
time=
      0.2s
[CV 5/5; 957/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22
[CV 1/5; 957/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.380 total
time=
      0.5s
[CV 1/5; 958/1000] START bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=4, n estimators=54
[CV 2/5; 957/1000] END bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=9, n_estimators=22;, score=0.378 total
time=
      0.5s
[CV 2/5; 958/1000] START bootstrap=False, max_depth=8, max_features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=54
[CV 3/5; 957/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=3, min samples split=9, n estimators=22;, score=0.354 total
time=
       0.5s
[CV 3/5; 958/1000] START bootstrap=False, max depth=8, max features=None,
min_samples_leaf=1, min_samples_split=4, n_estimators=54
[CV 4/5; 957/1000] END bootstrap=False, max_depth=12, max_features=None,
```

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\label{leaf} \begin{array}{ll} \texttt{min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=22;, score=0.372 total} \\ \texttt{time=} & 0.5s \end{array}
```

- [CV 4/5; 958/1000] START bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=54
- [CV 5/5; 957/1000] END bootstrap=False, max\_depth=12, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=22;, score=0.376 total time= 0.5s
- [CV 5/5; 958/1000] START bootstrap=False, max\_depth=8, max\_features=None, min samples leaf=1, min samples split=4, n estimators=54
- [CV 4/5; 955/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=66;, score=0.341 total time= 1.6s
- [CV 1/5; 959/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=36
- [CV 2/5; 958/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=54;, score=0.367 total time= 0.8s
- [CV 3/5; 958/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=54;, score=0.351 total time= 0.8s
- [CV 2/5; 959/1000] START bootstrap=False, max\_depth=15, max\_features=None, min samples leaf=2, min samples split=7, n estimators=36
- [CV 3/5; 959/1000] START bootstrap=False, max\_depth=15, max\_features=None, min samples leaf=2, min samples split=7, n estimators=36
- [CV 1/5; 958/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=54;, score=0.380 total time= 0.8s
- [CV 4/5; 959/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=36
- [CV 1/5; 955/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=66;, score=0.380 total time= 2.0s
- [CV 5/5; 959/1000] START bootstrap=False, max\_depth=15, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=36
- [CV 4/5; 958/1000] END bootstrap=False, max\_depth=8, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=4, n\_estimators=54;, score=0.359 total time= 0.8s
- [CV 1/5; 960/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=40
- [CV 5/5; 955/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=66;, score=0.359 total time= 1.8s
- [CV 2/5; 960/1000] START bootstrap=True, max\_depth=None, max\_features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=40
- [CV 2/5; 955/1000] END bootstrap=False, max\_depth=19, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=6, n\_estimators=66;, score=0.348 total time= 1.9s
- [CV 3/5; 960/1000] START bootstrap=True, max\_depth=None, max\_features=None,

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min_samples_leaf=3, min_samples_split=6, n_estimators=40
[CV 5/5; 958/1000] END bootstrap=False, max depth=8, max features=None,
min samples leaf=1, min samples split=4, n estimators=54;, score=0.370 total
time= 0.9s
[CV 4/5; 960/1000] START bootstrap=True, max depth=None, max features=None,
min samples leaf=3, min samples split=6, n estimators=40
[CV 3/5; 955/1000] END bootstrap=False, max depth=19, max features=None,
min_samples_leaf=2, min_samples_split=6, n_estimators=66;, score=0.321 total
time=
      1.9s
[CV 5/5; 960/1000] START bootstrap=True, max_depth=None, max_features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=40
[CV 1/5; 959/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=7, n estimators=36;, score=0.392 total
time=
       0.9s
[CV 1/5; 961/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=28
[CV 4/5; 960/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=40;, score=0.360 total
time=
      0.6s
[CV 2/5; 961/1000] START bootstrap=False, max depth=5, max features=None,
min samples leaf=1, min samples split=2, n estimators=28
[CV 2/5; 959/1000] END bootstrap=False, max depth=15, max features=None,
min_samples_leaf=2, min_samples_split=7, n_estimators=36;, score=0.370 total
time=
      0.9s
[CV 3/5; 961/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=28
[CV 4/5; 959/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=7, n estimators=36;, score=0.351 total
[CV 4/5; 961/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=28
[CV 1/5; 960/1000] END bootstrap=True, max_depth=None, max_features=None,
min samples leaf=3, min samples split=6, n estimators=40;, score=0.392 total
time=
      0.7s
[CV 5/5; 961/1000] START bootstrap=False, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=28
[CV 2/5; 960/1000] END bootstrap=True, max depth=None, max features=None,
min_samples_leaf=3, min_samples_split=6, n_estimators=40;, score=0.397 total
time= 0.7s
[CV 1/5; 962/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176
[CV 5/5; 959/1000] END bootstrap=False, max_depth=15, max_features=None,
min samples leaf=2, min samples split=7, n estimators=36;, score=0.381 total
time=
      0.9s
[CV 2/5; 962/1000] START bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176
[CV 3/5; 959/1000] END bootstrap=False, max_depth=15, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=7, n\_estimators=36;, score=0.332 total

time= 1.0s [CV 3/5; 962/1000] START bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=176 [CV 5/5; 960/1000] END bootstrap=True, max\_depth=None, max\_features=None, min samples leaf=3, min samples split=6, n estimators=40;, score=0.373 total time= 0.7s [CV 4/5; 962/1000] START bootstrap=False, max depth=13, max features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=176 [CV 3/5; 960/1000] END bootstrap=True, max depth=None, max features=None, min\_samples\_leaf=3, min\_samples\_split=6, n\_estimators=40;, score=0.375 total time= 0.8s[CV 5/5; 962/1000] START bootstrap=False, max\_depth=13, max\_features=sqrt, min\_samples\_leaf=2, min\_samples\_split=2, n\_estimators=176 [CV 2/5; 961/1000] END bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=28;, score=0.387 total time= 0.3s [CV 1/5; 963/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 1/5; 961/1000] END bootstrap=False, max\_depth=5, max\_features=None, min samples leaf=1, min samples split=2, n estimators=28;, score=0.405 total time= 0.4s[CV 2/5; 963/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 3/5; 961/1000] END bootstrap=False, max\_depth=5, max\_features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=28;, score=0.397 total time= 0.3s [CV 3/5; 963/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 4/5; 961/1000] END bootstrap=False, max depth=5, max features=None, min\_samples\_leaf=1, min\_samples\_split=2, n\_estimators=28;, score=0.367 total time= 0.3s [CV 4/5; 963/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 5/5; 961/1000] END bootstrap=False, max\_depth=5, max\_features=None, min samples leaf=1, min samples split=2, n estimators=28;, score=0.394 total time= 0.3s[CV 5/5; 963/1000] START bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86 [CV 2/5; 963/1000] END bootstrap=True, max\_depth=20, max\_features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86;, score=0.403 total time= 0.7s [CV 1/5; 964/1000] START bootstrap=True, max\_depth=8, max\_features=None, min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=16 [CV 4/5; 963/1000] END bootstrap=True, max depth=20, max features=sqrt, min\_samples\_leaf=3, min\_samples\_split=9, n\_estimators=86;, score=0.388 total [CV 2/5; 964/1000] START bootstrap=True, max\_depth=8, max\_features=None,

min\_samples\_leaf=2, min\_samples\_split=3, n\_estimators=16

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[CV 1/5; 964/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=16;, score=0.430 total
time=
      0.2s
[CV 3/5; 964/1000] START bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=16
[CV 3/5; 963/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=9, n estimators=86;, score=0.381 total
time=
      0.9s
[CV 4/5; 964/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=16
[CV 5/5; 963/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=9, n estimators=86;, score=0.389 total
time=
      0.8s
[CV 5/5; 964/1000] START bootstrap=True, max depth=8, max features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=16
[CV 1/5; 963/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=9, n_estimators=86;, score=0.398 total
time= 0.9s
[CV 1/5; 965/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=46
[CV 2/5; 964/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=16;, score=0.394 total
time= 0.2s
[CV 2/5; 965/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=46
[CV 4/5; 964/1000] END bootstrap=True, max_depth=8, max_features=None,
min samples leaf=2, min samples split=3, n estimators=16;, score=0.375 total
time=
      0.1s
[CV 3/5; 965/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=46
[CV 3/5; 964/1000] END bootstrap=True, max_depth=8, max_features=None,
min_samples_leaf=2, min_samples_split=3, n_estimators=16;, score=0.416 total
time=
      0.2s
[CV 4/5; 965/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=46
[CV 5/5; 964/1000] END bootstrap=True, max depth=8, max features=None,
min samples leaf=2, min samples split=3, n estimators=16;, score=0.397 total
time=
      0.2s
[CV 5/5; 965/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=46
[CV 1/5; 965/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=46;, score=0.382 total
      0.4s
[CV 1/5; 966/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=96
[CV 4/5; 965/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=46;, score=0.410 total
time=
       0.3s
```

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[CV 2/5; 966/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=96
[CV 2/5; 965/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=46;, score=0.419 total
time= 0.4s
[CV 3/5; 966/1000] START bootstrap=False, max depth=6, max features=None,
min samples leaf=3, min samples split=7, n estimators=96
[CV 3/5; 965/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=46;, score=0.379 total
time=
      0.3s
[CV 4/5; 966/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=96
[CV 5/5; 965/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=46;, score=0.387 total
[CV 5/5; 966/1000] START bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=96
[CV 2/5; 962/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.391 total
time=
       2.0s
[CV 1/5; 967/1000] START bootstrap=False, max depth=17, max features=None,
min samples leaf=1, min samples split=3, n estimators=188
[CV 1/5; 962/1000] END bootstrap=False, max depth=13, max features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.392 total
time=
       2.2s
[CV 3/5; 962/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.357 total
time=
        2.2s
[CV 2/5; 967/1000] START bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188
[CV 3/5; 967/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188
[CV 5/5; 962/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.382 total
time=
      2.2s
[CV 4/5; 967/1000] START bootstrap=False, max depth=17, max features=None,
min samples leaf=1, min samples split=3, n estimators=188
[CV 4/5; 962/1000] END bootstrap=False, max_depth=13, max_features=sqrt,
min_samples_leaf=2, min_samples_split=2, n_estimators=176;, score=0.375 total
time=
       2.3s
[CV 5/5; 967/1000] START bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188
[CV 1/5; 966/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=3, min samples split=7, n estimators=96;, score=0.396 total
time=
       1.2s
[CV 1/5; 968/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182
[CV 2/5; 966/1000] END bootstrap=False, max depth=6, max features=None,
```

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min samples leaf=3, min samples split=7, n estimators=96;, score=0.385 total
time=
      1.1s
[CV 2/5; 968/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182
[CV 3/5; 966/1000] END bootstrap=False, max depth=6, max features=None,
min_samples_leaf=3, min_samples_split=7, n_estimators=96;, score=0.334 total
time= 1.2s
[CV 3/5; 968/1000] START bootstrap=True, max_depth=12, max_features=None,
min samples leaf=1, min samples split=9, n estimators=182
[CV 5/5; 966/1000] END bootstrap=False, max_depth=6, max_features=None,
min samples leaf=3, min samples split=7, n estimators=96;, score=0.387 total
       1.2s
time=
[CV 4/5; 968/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182
[CV 4/5; 966/1000] END bootstrap=False, max depth=6, max features=None,
min samples leaf=3, min samples split=7, n estimators=96;, score=0.373 total
time=
      1.3s
[CV 5/5; 968/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182
[CV 2/5; 968/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=1, min samples split=9, n estimators=182;, score=0.401 total
       2.1s
time=
[CV 1/5; 969/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120
[CV 1/5; 968/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182;, score=0.396 total
time=
      2.2s
[CV 2/5; 969/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120
[CV 3/5; 968/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182;, score=0.398 total
[CV 3/5; 969/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120
[CV 4/5; 968/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182;, score=0.406 total
time=
       2.5s
[CV 4/5; 969/1000] START bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120
[CV 5/5; 968/1000] END bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=1, min_samples_split=9, n_estimators=182;, score=0.389 total
       2.5s
time=
[CV 5/5; 969/1000] START bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120
[CV 2/5; 969/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120;, score=0.394 total
time=
      1.5s
[CV 1/5; 970/1000] START bootstrap=True, max depth=20, max features=sqrt,
```

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min_samples_leaf=2, min_samples_split=3, n_estimators=118
[CV 1/5; 969/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120;, score=0.412 total
      1.8s
[CV 2/5; 970/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=118
[CV 3/5; 969/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120;, score=0.384 total
time=
      1.8s
[CV 3/5; 970/1000] START bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=118
[CV 5/5; 969/1000] END bootstrap=True, max_depth=14, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120;, score=0.395 total
time=
      1.8s
[CV 4/5; 970/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=118
[CV 3/5; 967/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188;, score=0.348 total
time=
      4.9s
[CV 5/5; 970/1000] START bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=118
[CV 1/5; 967/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188;, score=0.385 total
time=
       5.1s
[CV 1/5; 971/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 4/5; 969/1000] END bootstrap=True, max depth=14, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=120;, score=0.389 total
[CV 2/5; 971/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 4/5; 967/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188;, score=0.331 total
time=
      4.9s
[CV 3/5; 971/1000] START bootstrap=True, max_depth=18, max_features=None,
min samples leaf=1, min samples split=2, n estimators=164
[CV 5/5; 967/1000] END bootstrap=False, max depth=17, max features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188;, score=0.351 total
time= 5.0s
[CV 4/5; 971/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 2/5; 967/1000] END bootstrap=False, max_depth=17, max_features=None,
min_samples_leaf=1, min_samples_split=3, n_estimators=188;, score=0.366 total
time=
       5.2s
[CV 5/5; 971/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164
[CV 1/5; 970/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=118;, score=0.383 total
```

```
time=
        1.2s
[CV 1/5; 972/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 2/5; 970/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=118;, score=0.397 total
time=
        1.3s
[CV 2/5; 972/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 5/5; 970/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=118;, score=0.378 total
time= 1.0s
[CV 3/5; 972/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 4/5; 970/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=118;, score=0.367 total
time=
      1.1s
[CV 4/5; 972/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 3/5; 970/1000] END bootstrap=True, max_depth=20, max_features=sqrt,
min samples leaf=2, min samples split=3, n estimators=118;, score=0.379 total
time=
      1.2s
[CV 5/5; 972/1000] START bootstrap=False, max depth=20, max features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152
[CV 2/5; 972/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.379 total
time=
       2.0s
[CV 1/5; 973/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 4/5; 971/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.367 total
time=
       2.6s
[CV 2/5; 973/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 1/5; 971/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=1, min samples split=2, n estimators=164;, score=0.387 total
       2.9s
time=
[CV 3/5; 973/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 2/5; 971/1000] END bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.389 total
time=
       2.9s
[CV 4/5; 973/1000] START bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
[CV 3/5; 971/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=1, min_samples_split=2, n_estimators=164;, score=0.373 total
[CV 5/5; 973/1000] START bootstrap=False, max_depth=9, max_features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96
```

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[CV 1/5; 972/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.392 total
time=
       2.5s
[CV 1/5; 974/1000] START bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=4, n estimators=182
[CV 5/5; 971/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=1, min samples split=2, n estimators=164;, score=0.369 total
time=
       2.9s
[CV 2/5; 974/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 3/5; 972/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.360 total
time=
       2.3s
[CV 3/5; 974/1000] START bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 4/5; 972/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=1, min_samples_split=4, n_estimators=152;, score=0.350 total
       2.4s
[CV 4/5; 974/1000] START bootstrap=True, max_depth=10, max_features=None,
min samples leaf=2, min samples split=4, n estimators=182
[CV 5/5; 972/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=1, min samples split=4, n estimators=152;, score=0.362 total
time=
      2.4s
[CV 5/5; 974/1000] START bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182
[CV 2/5; 973/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.362 total
time=
       1.5s
[CV 1/5; 975/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88
[CV 1/5; 973/1000] END bootstrap=False, max depth=9, max features=None,
min_samples_leaf=1, min_samples_split=5, n_estimators=96;, score=0.370 total
time= 1.6s
[CV 2/5; 975/1000] START bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=88
[CV 4/5; 973/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.347 total
time=
      1.6s
[CV 3/5; 975/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88
[CV 5/5; 973/1000] END bootstrap=False, max_depth=9, max_features=None,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.365 total
[CV 4/5; 975/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88
[CV 2/5; 975/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88;, score=0.397 total
time=
       0.4s
```

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[CV 5/5; 975/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88
[CV 1/5; 975/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88;, score=0.412 total
time= 0.5s
[CV 1/5; 976/1000] START bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=20
[CV 3/5; 973/1000] END bootstrap=False, max depth=9, max features=None,
min samples leaf=1, min samples split=5, n estimators=96;, score=0.347 total
time=
      1.9s
[CV 2/5; 976/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20
[CV 1/5; 976/1000] END bootstrap=True, max depth=13, max features=sqrt,
min samples leaf=1, min samples split=6, n estimators=20;, score=0.417 total
[CV 3/5; 976/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20
[CV 2/5; 976/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20;, score=0.416 total
time=
      0.2s
[CV 4/5; 976/1000] START bootstrap=True, max_depth=13, max_features=sqrt,
min samples leaf=1, min samples split=6, n estimators=20
[CV 3/5; 976/1000] END bootstrap=True, max_depth=13, max_features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20;, score=0.398 total
time= 0.1s
[CV 5/5; 976/1000] START bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20
[CV 3/5; 975/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=88;, score=0.350 total
time=
      0.5s
[CV 1/5; 977/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124
[CV 4/5; 976/1000] END bootstrap=True, max depth=13, max features=sqrt,
min_samples_leaf=1, min_samples_split=6, n_estimators=20;, score=0.388 total
time=
      0.2s
[CV 2/5; 977/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=5, n estimators=124
[CV 4/5; 975/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=2, n_estimators=88;, score=0.359 total
time=
      0.5s
[CV 3/5; 977/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124
[CV 5/5; 975/1000] END bootstrap=False, max depth=5, max features=sqrt,
min samples leaf=3, min samples split=2, n estimators=88;, score=0.417 total
time=
       0.5s
[CV 4/5; 977/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124
[CV 5/5; 976/1000] END bootstrap=True, max depth=13, max features=sqrt,
```

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min samples leaf=1, min samples split=6, n estimators=20;, score=0.406 total
time=
      0.2s
[CV 5/5; 977/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124
[CV 2/5; 974/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.414 total
time= 2.2s
[CV 1/5; 978/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=1, min samples split=7, n estimators=186
[CV 1/5; 974/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.395 total
       2.3s
time=
[CV 2/5; 978/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186
[CV 3/5; 974/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.398 total
time=
       2.3s
[CV 3/5; 978/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186
[CV 4/5; 974/1000] END bootstrap=True, max depth=10, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.417 total
time=
       2.3s
[CV 4/5; 978/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186
[CV 5/5; 974/1000] END bootstrap=True, max_depth=10, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=182;, score=0.385 total
time=
      2.2s
[CV 5/5; 978/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186
[CV 5/5; 977/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124;, score=0.387 total
      0.9s
[CV 1/5; 979/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=88
[CV 1/5; 977/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124;, score=0.406 total
time= 1.1s
[CV 2/5; 979/1000] START bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=88
[CV 4/5; 977/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124;, score=0.376 total
      1.0s
time=
[CV 3/5; 979/1000] START bootstrap=True, max_depth=12, max_features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=88
[CV 3/5; 977/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124;, score=0.359 total
time=
      1.1s
```

[CV 4/5; 979/1000] START bootstrap=True, max depth=12, max features=None,

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min_samples_leaf=3, min_samples_split=3, n_estimators=88
[CV 2/5; 977/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=5, n_estimators=124;, score=0.392 total
      1.1s
[CV 5/5; 979/1000] START bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=3, n estimators=88
[CV 1/5; 978/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186;, score=0.421 total
time=
      1.3s
[CV 1/5; 980/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 2/5; 978/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186;, score=0.410 total
time=
      1.3s
[CV 2/5; 980/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 3/5; 978/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186;, score=0.395 total
time=
      1.2s
[CV 3/5; 980/1000] START bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182
[CV 4/5; 978/1000] END bootstrap=True, max depth=5, max features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186;, score=0.376 total
time=
      1.3s
[CV 4/5; 980/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 5/5; 978/1000] END bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=1, min_samples_split=7, n_estimators=186;, score=0.391 total
[CV 5/5; 980/1000] START bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182
[CV 1/5; 979/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=88;, score=0.404 total
time=
      1.0s
[CV 1/5; 981/1000] START bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=6, n estimators=112
[CV 2/5; 979/1000] END bootstrap=True, max depth=12, max features=None,
min_samples_leaf=3, min_samples_split=3, n_estimators=88;, score=0.403 total
time= 1.2s
[CV 2/5; 981/1000] START bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112
[CV 3/5; 979/1000] END bootstrap=True, max depth=12, max features=None,
min samples leaf=3, min samples split=3, n estimators=88;, score=0.385 total
time=
      1.2s
[CV 3/5; 981/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112
[CV 4/5; 979/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=88;, score=0.392 total
```

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time=
        1.2s
[CV 4/5; 981/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112
[CV 5/5; 979/1000] END bootstrap=True, max_depth=12, max_features=None,
min samples leaf=3, min samples split=3, n estimators=88;, score=0.382 total
time=
        1.2s
[CV 5/5; 981/1000] START bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112
[CV 1/5; 981/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112;, score=0.412 total
time=
      1.3s
[CV 1/5; 982/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 2/5; 981/1000] END bootstrap=True, max depth=11, max features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112;, score=0.411 total
time=
      1.4s
[CV 2/5; 982/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 3/5; 981/1000] END bootstrap=True, max_depth=11, max_features=None,
min samples leaf=1, min samples split=6, n estimators=112;, score=0.398 total
time=
      1.5s
[CV 3/5; 982/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 4/5; 981/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112;, score=0.401 total
time=
       1.4s
[CV 4/5; 982/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 5/5; 981/1000] END bootstrap=True, max_depth=11, max_features=None,
min_samples_leaf=1, min_samples_split=6, n_estimators=112;, score=0.391 total
time=
       1.5s
[CV 5/5; 982/1000] START bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112
[CV 3/5; 980/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182;, score=0.354 total
time=
       2.5s
[CV 1/5; 983/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=32
[CV 1/5; 982/1000] END bootstrap=False, max_depth=9, max_features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.408 total
time=
      0.9s
[CV 2/5; 983/1000] START bootstrap=False, max_depth=12, max_features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=32
[CV 2/5; 980/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.387 total
[CV 3/5; 983/1000] START bootstrap=False, max_depth=12, max_features=None,
```

min\_samples\_leaf=2, min\_samples\_split=8, n\_estimators=32

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[CV 1/5; 980/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.386 total
time=
       2.9s
[CV 4/5; 983/1000] START bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=32
[CV 4/5; 980/1000] END bootstrap=False, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=182;, score=0.369 total
time=
       2.7s
[CV 5/5; 983/1000] START bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=32
[CV 5/5; 980/1000] END bootstrap=False, max_depth=20, max_features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=182;, score=0.373 total
time=
       2.7s
[CV 1/5; 984/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 2/5; 982/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.384 total
time= 1.0s
[CV 2/5; 984/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=6
[CV 1/5; 984/1000] END bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=6;, score=0.414 total
time= 0.0s
[CV 3/5; 984/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 2/5; 984/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.373 total
time=
      0.0s
[CV 4/5; 984/1000] START bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6
[CV 3/5; 982/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.365 total
time=
      1.0s
[CV 3/5; 984/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=9, n estimators=6;, score=0.411 total
time= 0.0s
[CV 5/5; 984/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=9, n estimators=6
[CV 1/5; 985/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 1/5; 983/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=32;, score=0.379 total
      0.6s
[CV 2/5; 985/1000] START bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 4/5; 984/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.379 total
time=
       0.0s
```

```
[CV 3/5; 985/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 5/5; 984/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=9, n_estimators=6;, score=0.366 total
time= 0.0s
[CV 4/5; 985/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20
[CV 2/5; 983/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=8, n estimators=32;, score=0.375 total
time=
      0.6s
[CV 5/5; 985/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20
[CV 4/5; 982/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.384 total
[CV 1/5; 986/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180
[CV 5/5; 982/1000] END bootstrap=False, max depth=9, max features=sqrt,
min_samples_leaf=2, min_samples_split=6, n_estimators=112;, score=0.395 total
time=
      1.1s
[CV 2/5; 986/1000] START bootstrap=True, max depth=8, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=180
[CV 2/5; 985/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20;, score=0.420 total
time= 0.2s
[CV 3/5; 986/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180
[CV 1/5; 985/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.404 total
time=
      0.3s
[CV 4/5; 986/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180
[CV 5/5; 985/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=4, n_estimators=20;, score=0.381 total
time= 0.2s
[CV 3/5; 983/1000] END bootstrap=False, max depth=12, max features=None,
min samples leaf=2, min samples split=8, n estimators=32;, score=0.357 total
time=
      0.7s
[CV 5/5; 986/1000] START bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180
[CV 1/5; 987/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154
[CV 3/5; 985/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min samples leaf=2, min samples split=4, n estimators=20;, score=0.348 total
time=
       0.3s
[CV 2/5; 987/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154
[CV 4/5; 985/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
```

```
min samples leaf=2, min samples split=4, n estimators=20;, score=0.373 total
time=
      0.3s
[CV 3/5; 987/1000] START bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154
[CV 4/5; 983/1000] END bootstrap=False, max depth=12, max features=None,
min_samples_leaf=2, min_samples_split=8, n_estimators=32;, score=0.375 total
time= 0.7s
[CV 4/5; 987/1000] START bootstrap=True, max depth=17, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=154
[CV 5/5; 983/1000] END bootstrap=False, max_depth=12, max_features=None,
min samples leaf=2, min samples split=8, n estimators=32;, score=0.363 total
       0.7s
time=
[CV 5/5; 987/1000] START bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154
[CV 1/5; 986/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180;, score=0.428 total
time=
      1.1s
[CV 1/5; 988/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98
[CV 3/5; 986/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180;, score=0.387 total
time= 0.9s
[CV 2/5; 988/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98
[CV 5/5; 986/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180;, score=0.400 total
time=
      0.9s
[CV 3/5; 988/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98
[CV 2/5; 986/1000] END bootstrap=True, max_depth=8, max_features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180;, score=0.411 total
      1.1s
[CV 4/5; 988/1000] START bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98
[CV 4/5; 986/1000] END bootstrap=True, max depth=8, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=180;, score=0.411 total
time= 1.1s
[CV 5/5; 988/1000] START bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98
[CV 2/5; 987/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154;, score=0.410 total
      1.4s
time=
[CV 1/5; 989/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=36
[CV 3/5; 987/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154;, score=0.387 total
time=
      1.4s
[CV 2/5; 989/1000] START bootstrap=True, max_depth=18, max_features=None,
```

```
min_samples_leaf=2, min_samples_split=9, n_estimators=36
[CV 1/5; 987/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154;, score=0.406 total
      1.5s
[CV 3/5; 989/1000] START bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=9, n estimators=36
[CV 4/5; 987/1000] END bootstrap=True, max depth=17, max features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154;, score=0.367 total
time=
      1.4s
[CV 4/5; 989/1000] START bootstrap=True, max_depth=18, max_features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=36
[CV 5/5; 987/1000] END bootstrap=True, max_depth=17, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=154;, score=0.406 total
time=
      1.4s
[CV 5/5; 989/1000] START bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=36
[CV 1/5; 989/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=36;, score=0.402 total
time=
      0.5s
[CV 1/5; 990/1000] START bootstrap=False, max depth=8, max features=sqrt,
min samples leaf=1, min samples split=7, n estimators=196
[CV 2/5; 989/1000] END bootstrap=True, max depth=18, max features=None,
min_samples_leaf=2, min_samples_split=9, n_estimators=36;, score=0.398 total
time=
      0.6s
[CV 2/5; 990/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 3/5; 989/1000] END bootstrap=True, max depth=18, max features=None,
min samples leaf=2, min samples split=9, n estimators=36;, score=0.385 total
[CV 3/5; 990/1000] START bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 4/5; 989/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=36;, score=0.394 total
time=
      0.6s
[CV 4/5; 990/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 2/5; 988/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98;, score=0.379 total
time= 1.3s
[CV 5/5; 990/1000] START bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196
[CV 3/5; 988/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=98;, score=0.353 total
time=
      1.3s
[CV 1/5; 991/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 1/5; 988/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=98;, score=0.404 total
```

```
time=
        1.5s
[CV 2/5; 991/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 5/5; 989/1000] END bootstrap=True, max_depth=18, max_features=None,
min samples leaf=2, min samples split=9, n estimators=36;, score=0.382 total
time=
       0.6s
[CV 3/5; 991/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 4/5; 988/1000] END bootstrap=False, max depth=17, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98;, score=0.382 total
time= 1.4s
[CV 4/5; 991/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 5/5; 988/1000] END bootstrap=False, max_depth=17, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=98;, score=0.373 total
time=
      1.4s
[CV 5/5; 991/1000] START bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190
[CV 1/5; 990/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=196;, score=0.409 total
time=
      1.6s
[CV 1/5; 992/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 5/5; 990/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.379 total
time=
       1.4s
[CV 2/5; 992/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 2/5; 990/1000] END bootstrap=False, max depth=8, max features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.388 total
time=
      1.7s
[CV 3/5; 992/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 3/5; 990/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min samples leaf=1, min samples split=7, n estimators=196;, score=0.359 total
      1.7s
time=
[CV 4/5; 992/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 4/5; 990/1000] END bootstrap=False, max_depth=8, max_features=sqrt,
min_samples_leaf=1, min_samples_split=7, n_estimators=196;, score=0.404 total
time=
      1.7s
[CV 5/5; 992/1000] START bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32
[CV 1/5; 992/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32;, score=0.387 total
[CV 2/5; 992/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.397 total
```

```
time=
        0.3s
[CV 1/5; 993/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 2/5; 993/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=32
[CV 3/5; 992/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.379 total
time=
      0.3s
[CV 3/5; 993/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 5/5; 992/1000] END bootstrap=True, max depth=20, max features=sqrt,
min samples leaf=3, min samples split=3, n estimators=32;, score=0.375 total
time=
      0.3s
[CV 4/5; 993/1000] START bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=32
[CV 4/5; 992/1000] END bootstrap=True, max depth=20, max features=sqrt,
min_samples_leaf=3, min_samples_split=3, n_estimators=32;, score=0.397 total
time= 0.3s
[CV 5/5; 993/1000] START bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=32
[CV 2/5; 993/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=32;, score=0.387 total
time= 0.3s
[CV 1/5; 994/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 1/5; 993/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=32;, score=0.405 total
time=
      0.3s
[CV 2/5; 994/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 4/5; 993/1000] END bootstrap=False, max depth=5, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=32;, score=0.367 total
time=
      0.3s
[CV 3/5; 994/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=66
[CV 3/5; 993/1000] END bootstrap=False, max depth=5, max features=None,
min samples leaf=2, min samples split=4, n estimators=32;, score=0.397 total
time=
      0.3s
[CV 4/5; 994/1000] START bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 5/5; 993/1000] END bootstrap=False, max_depth=5, max_features=None,
min samples leaf=2, min samples split=4, n estimators=32;, score=0.394 total
      0.3s
[CV 5/5; 994/1000] START bootstrap=False, max depth=18, max features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66
[CV 2/5; 994/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66;, score=0.392 total
```

time=

0.8s

```
[CV 1/5; 995/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 1/5; 994/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66;, score=0.389 total
time= 0.8s
[CV 2/5; 995/1000] START bootstrap=False, max depth=16, max features=None,
min samples leaf=3, min samples split=5, n estimators=80
[CV 1/5; 991/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=4, n estimators=190;, score=0.405 total
time=
       2.8s
[CV 3/5; 995/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 4/5; 994/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=66;, score=0.353 total
[CV 4/5; 991/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190;, score=0.375 total
[CV 2/5; 991/1000] END bootstrap=True, max_depth=16, max_features=None,
min samples leaf=2, min samples split=4, n estimators=190;, score=0.408 total
time= 3.0s
[CV 4/5; 995/1000] START bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 5/5; 995/1000] START bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80
[CV 1/5; 996/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106
[CV 3/5; 994/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min samples leaf=3, min samples split=8, n estimators=66;, score=0.346 total
time=
      1.0s
[CV 2/5; 996/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106
[CV 5/5; 994/1000] END bootstrap=False, max_depth=18, max_features=sqrt,
min_samples_leaf=3, min_samples_split=8, n_estimators=66;, score=0.389 total
time=
      1.0s
[CV 3/5; 996/1000] START bootstrap=False, max depth=14, max features=sqrt,
min samples leaf=2, min samples split=5, n estimators=106
[CV 3/5; 991/1000] END bootstrap=True, max_depth=16, max_features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190;, score=0.366 total
      3.1s
time=
[CV 4/5; 996/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106
[CV 5/5; 991/1000] END bootstrap=True, max depth=16, max features=None,
min_samples_leaf=2, min_samples_split=4, n_estimators=190;, score=0.370 total
time=
        3.0s
[CV 5/5; 996/1000] START bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106
[CV 3/5; 996/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
```

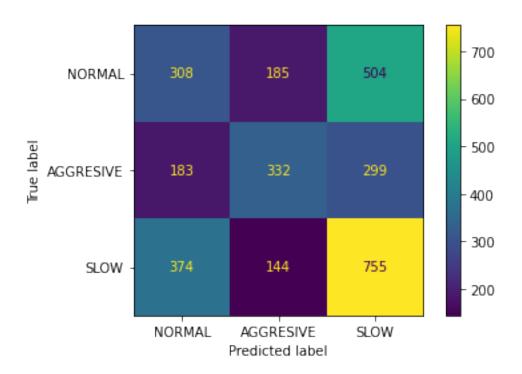
```
min_samples_leaf=2, min_samples_split=5, n_estimators=106;, score=0.340 total
time=
      1.1s
[CV 1/5; 997/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 2/5; 996/1000] END bootstrap=False, max depth=14, max features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106;, score=0.384 total
time= 1.3s
[CV 2/5; 997/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min samples leaf=3, min samples split=4, n estimators=194
[CV 1/5; 996/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106;, score=0.396 total
       1.4s
time=
[CV 3/5; 997/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 4/5; 996/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106;, score=0.372 total
time=
      1.4s
[CV 4/5; 997/1000] START bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 2/5; 995/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80;, score=0.387 total
time= 1.8s
[CV 5/5; 997/1000] START bootstrap=False, max_depth=5, max_features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194
[CV 5/5; 996/1000] END bootstrap=False, max_depth=14, max_features=sqrt,
min_samples_leaf=2, min_samples_split=5, n_estimators=106;, score=0.372 total
time=
      1.4s
[CV 1/5; 998/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 1/5; 995/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=80;, score=0.380 total
       2.0s
[CV 2/5; 998/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 3/5; 995/1000] END bootstrap=False, max depth=16, max features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80;, score=0.335 total
time=
       2.0s
[CV 3/5; 998/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 4/5; 995/1000] END bootstrap=False, max_depth=16, max_features=None,
min_samples_leaf=3, min_samples_split=5, n_estimators=80;, score=0.329 total
      1.9s
time=
[CV 4/5; 998/1000] START bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 5/5; 995/1000] END bootstrap=False, max_depth=16, max_features=None,
min samples leaf=3, min samples split=5, n estimators=80;, score=0.360 total
time=
       2.0s
```

[CV 5/5; 998/1000] START bootstrap=True, max\_depth=16, max\_features=sqrt,

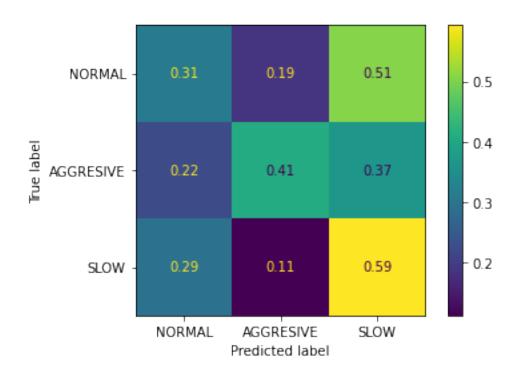
```
min_samples_leaf=2, min_samples_split=7, n_estimators=96
[CV 1/5; 997/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.411 total
time= 1.0s
[CV 1/5; 999/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=2, n estimators=186
[CV 1/5; 998/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.417 total
time=
      0.9s
[CV 2/5; 999/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=186
[CV 5/5; 997/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.414 total
time=
      1.0s
[CV 3/5; 999/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=186
[CV 2/5; 998/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.429 total
time=
      0.8s
[CV 4/5; 999/1000] START bootstrap=True, max depth=5, max features=None,
min samples leaf=3, min samples split=2, n estimators=186
[CV 2/5; 997/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.398 total
time=
      1.1s
[CV 5/5; 999/1000] START bootstrap=True, max_depth=5, max_features=None,
min_samples_leaf=3, min_samples_split=2, n_estimators=186
[CV 3/5; 997/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.350 total
[CV 1/5; 1000/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=78
[CV 4/5; 997/1000] END bootstrap=False, max depth=5, max features=sqrt,
min_samples_leaf=3, min_samples_split=4, n_estimators=194;, score=0.365 total
time=
      1.1s
[CV 2/5; 1000/1000] START bootstrap=True, max depth=19, max features=sqrt,
min samples leaf=2, min samples split=3, n estimators=78
[CV 3/5; 998/1000] END bootstrap=True, max depth=16, max features=sqrt,
min_samples_leaf=2, min_samples_split=7, n_estimators=96;, score=0.356 total
time= 0.9s
[CV 3/5; 1000/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=78
[CV 4/5; 998/1000] END bootstrap=True, max depth=16, max features=sqrt,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.398 total
time=
      0.9s
[CV 4/5; 1000/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
min_samples_leaf=2, min_samples_split=3, n_estimators=78
[CV 5/5; 998/1000] END bootstrap=True, max_depth=16, max_features=sqrt,
min samples leaf=2, min samples split=7, n estimators=96;, score=0.382 total
```

```
time=
            0.9s
    [CV 5/5; 1000/1000] START bootstrap=True, max_depth=19, max_features=sqrt,
    min_samples_leaf=2, min_samples_split=3, n_estimators=78
    [CV 1/5; 1000/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
    min samples leaf=2, min samples split=3, n estimators=78;, score=0.415 total
    time=
            0.8s
    [CV 2/5; 1000/1000] END bootstrap=True, max depth=19, max features=sqrt,
    min_samples_leaf=2, min_samples_split=3, n_estimators=78;, score=0.392 total
           0.8s
    [CV 3/5; 1000/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
    min samples leaf=2, min samples split=3, n estimators=78;, score=0.384 total
           0.8s
    [CV 1/5; 999/1000] END bootstrap=True, max_depth=5, max_features=None,
    min_samples_leaf=3, min_samples_split=2, n_estimators=186;, score=0.420 total
    [CV 4/5; 1000/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
    min_samples_leaf=2, min_samples_split=3, n_estimators=78;, score=0.375 total
    time= 0.7s
    [CV 5/5; 1000/1000] END bootstrap=True, max_depth=19, max_features=sqrt,
    min_samples_leaf=2, min_samples_split=3, n_estimators=78;, score=0.395 total
    time= 0.7s
    [CV 4/5; 999/1000] END bootstrap=True, max depth=5, max features=None,
    min_samples_leaf=3, min_samples_split=2, n_estimators=186;, score=0.376 total
    time=
           1.2s
    [CV 2/5; 999/1000] END bootstrap=True, max_depth=5, max_features=None,
    min_samples_leaf=3, min_samples_split=2, n_estimators=186;, score=0.408 total
    time=
          1.3s
    [CV 5/5; 999/1000] END bootstrap=True, max_depth=5, max_features=None,
    min_samples_leaf=3, min_samples_split=2, n_estimators=186;, score=0.391 total
    time=
          1.2s
    [CV 3/5; 999/1000] END bootstrap=True, max_depth=5, max_features=None,
    min_samples_leaf=3, min_samples_split=2, n_estimators=186;, score=0.398 total
    time=
           1.3s
[]: RandomizedSearchCV(cv=5,
                        estimator=RandomForestClassifier(class_weight='balanced',
                                                         criterion='entropy',
                                                         min_impurity_decrease=0,
                                                         random_state=0),
                        n_iter=1000, n_jobs=10,
                        param_distributions={'bootstrap': [True, False],
                                             'max_depth': [5, 5, 6, 7, 8, 8, 9, 10,
                                                           11, 12, 12, 13, 14, 15,
                                                           16, 16, 17, 18, 19, 20,
                                                           None],
                                             'max_features': ['sqrt', None],
                                             'min_samples_leaf': array([1, 2, 3]),
```

```
'min_s...
                                            'n_estimators': array([ 2, 4,
                                                                             6,
       10, 12, 14, 16, 18, 20, 22, 24, 26,
                      32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52,
            28,
                 30,
            54, 56, 58, 60, 62, 64,
                                         66, 68, 70, 72, 74, 76, 78,
                                        92, 94, 96, 98, 100, 102, 104,
            80, 82, 84, 86, 88, 90,
           106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130,
           132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156,
           158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182,
           184, 186, 188, 190, 192, 194, 196, 198])},
                       random state=0, verbose=10)
[]: random_gscv.best_params_
[]: {'n estimators': 160,
     'min_samples_split': 9,
     'min_samples_leaf': 3,
     'max_features': 'sqrt',
     'max_depth': 10,
     'bootstrap': True}
[]: random_gscv.best_score_
[]: 0.41334155300403275
[]: random_gscv.score(X_training, y_training)
[]: 0.6891100702576113
[]: random_gscv.score(X_test, y_test)
[]: 0.45233463035019456
[]: classes = ["NORMAL", "AGGRESIVE", "SLOW"]
[]: y_pred = random_gscv.predict(X_test)
    CM = confusion_matrix(y_test, y_pred)
    display = ConfusionMatrixDisplay(confusion_matrix=CM,
                           display_labels=classes)
    display.plot()
[]: <sklearn.metrics._plot.confusion_matrix.ConfusionMatrixDisplay at
    0x7facf746b700>
```



[]: <sklearn.metrics.\_plot.confusion\_matrix.ConfusionMatrixDisplay at 0x7facf748d600>



## Evaluate improvment

```
Model Performance
Accuracy = 0.40%.
Model Performance
Accuracy = 0.45%.
Improvement of 12.14%.
```

[]: