7ty6yrag5

September 7, 2024

1

[ ]:
```
!pip install optuna

import tensorflow as tf
from scipy.io import loadmat
import matplotlib.pyplot as plt
import numpy as np
import os
import pandas as pd
from sklearn.model_selection import train_test_split
import xgboost
from xgboost import XGBRegressor
from sklearn.metrics import mean_squared_error, mean_absolute_error
import time
import datetime
from pandas.tseries.offsets import DateOffset
from sklearn.model_selection import GridSearchCV
import requests
import pandas as pd
import xml.etree.ElementTree as ET
import pandas as pd
from datetime import datetime
import optuna
import optuna.visualization as visualization
from optuna.trial import Trial
#import xgboost as xgb
import holidays
#from sktime.utils.plotting import plot_series
```

```
Requirement already satisfied: optuna in /usr/local/lib/python3.10/dist-packages
(3.6.1)
Requirement already satisfied: alembic>=1.5.0 in /usr/local/lib/python3.10/dist-
packages (from optuna) (1.13.2)
Requirement already satisfied: colorlog in /usr/local/lib/python3.10/dist-
packages (from optuna) (6.8.2)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages
(from optuna) (1.26.4)
```

```
Requirement already satisfied: packaging>=20.0 in
/usr/local/lib/python3.10/dist-packages (from optuna) (24.1)
Requirement already satisfied: sqlalchemy>=1.3.0 in
/usr/local/lib/python3.10/dist-packages (from optuna) (2.0.32)
Requirement already satisfied: tqdm in /usr/local/lib/python3.10/dist-packages
(from optuna) (4.66.5)
Requirement already satisfied: PyYAML in /usr/local/lib/python3.10/dist-packages
(from optuna) (6.0.2)
Requirement already satisfied: Mako in /usr/local/lib/python3.10/dist-packages
(from alembic>=1.5.0->optuna) (1.3.5)
Requirement already satisfied: typing-extensions>=4 in
/usr/local/lib/python3.10/dist-packages (from alembic>=1.5.0->optuna) (4.12.2)
Requirement already satisfied: greenlet!=0.4.17 in
/usr/local/lib/python3.10/dist-packages (from sqlalchemy>=1.3.0->optuna) (3.0.3)
Requirement already satisfied: MarkupSafe>=0.9.2 in
/usr/local/lib/python3.10/dist-packages (from Mako->alembic>=1.5.0->optuna)
(2.1.5)
```

[ ]:
```python
# Run this cell to connect to your Drive folder

from google.colab import drive
drive.mount('/content/gdrive')
```

```
Drive already mounted at /content/gdrive; to attempt to forcibly remount, call
drive.mount("/content/gdrive", force_remount=True).
```

[ ]:
```python
#
exchange_rates = pd.read_csv('/content/gdrive/MyDrive/usdrub_d.csv',␣
 ↪parse_dates=['Date'])
exchange_rates.rename(columns={'Date': 'ds'}, inplace=True)

#
your_data = pd.read_csv('/content/gdrive/MyDrive/DataStore/salesD_smoothed.
 ↪csv', parse_dates=['ds'])
#your_data = pd.read_csv('/content/gdrive/MyDrive/DataStore/
 ↪salesD_double_smoothed.csv', parse_dates=['ds'])

#
merged_df = pd.merge(your_data, exchange_rates, on='ds', how='left')

#
merged_df['Close'] = merged_df['Close'].fillna(method='ffill')

#
merged_df.to_csv('merged_data.csv', index=False)
```

```
<ipython-input-78-e1d02170ade3>:13: FutureWarning:
```

```
Series.fillna with 'method' is deprecated and will raise in a future version.
Use obj.ffill() or obj.bfill() instead.
```

[ ]:
```python
data = pd.read_csv('merged_data.csv', parse_dates=['ds'])

ru_holidays = holidays.RU()

#
data['is_holiday'] = 0
for i in range(len(data)):
    date = data['ds'][i]
    if date in ru_holidays:
        data.loc[i, 'is_holiday'] = 1  #        .loc

#
data.to_csv('your_data_with_holidays.csv', index=False)
```

[ ]:
```python
'''
#
Deficis = pd.read_csv('/content/gdrive/MyDrive/DataStore/    _  .csv',␣
 ↪parse_dates=['Date'])
Deficis.rename(columns={'Date': 'ds'}, inplace=True)

#
your_data = pd.read_csv('your_data_with_holidays.csv', parse_dates=['ds'])

#
merged_df = pd.merge(your_data, Deficis, on='ds', how='left')

#
merged_df['Def'] = merged_df['%_    _   '].fillna(method='ffill')

#
merged_df.to_csv('completed_data.csv', index=False)
'''
```

[ ]:
```
"\n#                \nDeficis =
pd.read_csv('/content/gdrive/MyDrive/DataStore/    _ .csv',
parse_dates=['Date'])\nDeficis.rename(columns={'Date': 'ds'}, inplace=True)\n\n#
             \nyour_data = pd.read_csv('your_data_with_holidays.csv',
parse_dates=['ds'])\n\n#            \nmerged_df = pd.merge(your_data,
Deficis, on='ds', how='left')\n\n#            \nmerged_df['Def'] =
merged_df['%_    _   '].fillna(method='ffill')\n\n#
    \nmerged_df.to_csv('completed_data.csv', index=False)\n"
```

[ ]:
```
df_forFCST = pd.read_csv(  r'your_data_with_holidays.csv' )

df_forFCST.set_index( 'ds', inplace = True )
df_forFCST.index = pd.to_datetime( df_forFCST.index )
df_forFCST.index
#df_forFCST['Def'] = df_forFCST['Def'].str.replace(',', '.')
```

[ ]:
```
DatetimeIndex(['2019-01-01', '2019-01-02', '2019-01-03', '2019-01-04',
               '2019-01-05', '2019-01-06', '2019-01-07', '2019-01-08',
               '2019-01-09', '2019-01-10',
               …
               '2024-07-22', '2024-07-23', '2024-07-24', '2024-07-25',
               '2024-07-26', '2024-07-27', '2024-07-28', '2024-07-29',
               '2024-07-30', '2024-07-31'],
              dtype='datetime64[ns]', name='ds', length=2039, freq=None)
```

[ ]:
```
def windowed_dataset( series, window_size, batch_size ):
    """Generates dataset windows

    Args:
      series (array of float) - contains the values of the time series
      window_size (int) - the number of time steps to include in the feature
      batch_size (int) - the batch size
      shuffle_buffer(int) - buffer size to use for the shuffle method

    Returns:
      dataset (TF Dataset) - TF Dataset containing time windows
    """

    # Generate a TF Dataset from the series values
    dataset = tf.data.Dataset.from_tensor_slices(series)

    # Window the data but only take those with the specified size
    dataset = dataset.window(window_size + 1, shift=1, drop_remainder=True)

    # Flatten the windows by putting its elements in a single batch
    dataset = dataset.flat_map(lambda window: window.batch(window_size + 1))

    # Create tuples with features and labels
    dataset = dataset.map(lambda window: (window[:-1], window[-1, 0])) #␣
 ↪Extract 'y_mix' as the label

    # Create batches of windows
    # dataset = dataset.batch( batch_size ).prefetch(1)
    dataset = dataset.batch(batch_size, drop_remainder=True).prefetch(1)

    return dataset
```

```
# Visualizes time series data
def plot_series(x, y, format="-", start=0, end=None,
                title=None, xlabel=None, ylabel=None, legend=None ):
    """
    Visualizes time series data

    Args:
      x (array of int) - contains values for the x-axis
      y (array of int or tuple of arrays) - contains the values for the y-axis
      format (string) - line style when plotting the graph
      label (string) - tag for the line
      start (int) - first time step to plot
      end (int) - last time step to plot
      title (string) - title of the plot
      xlabel (string) - label for the x-axis
      ylabel (string) - label for the y-axis
      legend (list of strings) - legend for the plot
    """

    # Setup dimensions of the graph figure
    plt.figure(figsize=(8, 4))

    # Check if there are more than two series to plot
    if type(y) is tuple:

      # Loop over the y elements
      for y_curr in y:

        # Plot the x and current y values
        plt.plot(x[start:end], y_curr[start:end], format)

    else:
      # Plot the x and y values
      plt.plot(x[start:end], y[start:end], format)

    # Label the x-axis
    plt.xlabel(xlabel)

    # Label the y-axis
    plt.ylabel(ylabel)

    # Set the legend
    if legend:
      plt.legend(legend)

    # Set the title
```

```
    plt.title(title)

    # Overlay a grid on the graph
    plt.grid(True)

    # Draw the graph on screen
    plt.show()

# Feature engineering after split
def add_features( df, max_mix ):
  df = df.copy()
  # max_mix = df.y_mix.max()
  df['y_mix'] = df.y_mix / max_mix
  df['month_number'] = df.index.month / df.index.month.max()
  df['day_of_week'] = df.index.dayofweek / df.index.dayofweek.max()
  df['day_of_month'] = df.index.day / df.index.day.max()
  df['Close'] = df['Close'] / df['Close'].max()
  #df['Def'] = df['Def'].str.rstrip('%').astype('float') / 100  # Remove '%'␣
 ↪and convert to float

  return df
```

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[ ]:
```
# Split data first
split_dateSm = pd.to_datetime( '2024-04-30' )
train_dfSm = df_forFCST[ df_forFCST.index <= split_dateSm ]
#valid_dfSm = df_forFCST[ df_forFCST.index > split_dateSm ]


max_mix = df_forFCST[ df_forFCST.index <= split_dateSm ]['y_mix'].max()
train_dfSm = add_features( train_dfSm, max_mix )
#valid_dfSm = add_features( valid_dfSm, max_mix )

# Form numpy arrays
time_trainSm = np.array( train_dfSm.reset_index()['ds'] )
x_trainSm = np.array( train_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'is_holiday', 'Close']] )

#time_validSm = np.array( valid_dfSm.reset_index()['ds'])
#x_validSm = np.array( valid_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month']] )
print(len(x_trainSm))
```

1947

[ ]:
```
features = ['month_number', 'day_of_week', 'day_of_month', 'Close',␣
 ↪'is_holiday']
target = 'y_mix'

# Prepare data for XGBoost
dateSm = add_features( df_forFCST, max_mix )

X = dateSm[features]
y = dateSm[target]

split_dateSm = pd.to_datetime( '2024-02-29' )
ltrain_dfSm = df_forFCST[ df_forFCST.index <= split_dateSm ]

date_max_mix = len(ltrain_dfSm)

# Split data into training and testing sets (adjust test_size as needed)
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size= 1 -␣
 ↪(date_max_mix / len(df_forFCST)), shuffle=False)
X_test = X_test[:-61]
y_test = y_test[:-61]
print(X_test)
```

```
            month_number  day_of_week  day_of_month     Close  is_holiday
ds
2024-03-01      0.250000     0.666667      0.032258  0.603407           0
2024-03-02      0.250000     0.833333      0.064516  0.603407           0
2024-03-03      0.250000     1.000000      0.096774  0.603407           0
2024-03-04      0.250000     0.000000      0.129032  0.601179           0
2024-03-05      0.250000     0.166667      0.161290  0.597251           0
…                    …            …             …         …           …
2024-05-27      0.416667     0.000000      0.870968  0.583352           0
2024-05-28      0.416667     0.166667      0.903226  0.581544           0
2024-05-29      0.416667     0.333333      0.935484  0.588775           0
2024-05-30      0.416667     0.500000      0.967742  0.591733           0
2024-05-31      0.416667     0.666667      1.000000  0.594033           0

[92 rows x 5 columns]
```

[ ]:
```
model = XGBRegressor(objective='reg:squarederror',
                     n_estimators=558,  # Adjust as needed
                     max_depth=11,  # Adjust as needed
                     learning_rate=0.4,  # Adjust as needed
                     subsample=0.8866,  # Adjust as needed
                     #colsample_bytree=1,  # Adjust as needed
                     #reg_alpha=0,  # Adjust as needed
                     reg_lambda=0.392)  # Adjust as needed
```

```
# Train the model
model.fit(X_train, y_train)

# Make predictions on test data
y_pred = model.predict(X_test)

# Evaluate model performance
rmse = mean_squared_error(y_test, y_pred, squared=False)
mae = mean_absolute_error(y_test, y_pred)

print(f"RMSE: {rmse:.4f}")
print(f"MAE: {mae:.4f}")
```

```
RMSE: 0.0835
MAE: 0.0612
```

[ ]:
```
def objective(trial):
    """            Optuna."""
    '''
    llrat = [0.287, 0.319, 0.301, 0.339, 0.340, 0.337]
    rlrat = [0.327, 0.359, 0.341, 0.379, 0.380, 0.377]
    ldep = [9, 9, 9, 9, 9, 10]
    rdep = [11, 11, 11, 11, 12, 12]
    lest = [616, 1816, 1855, 1929, 1919, 2261]
    rest = [660, 1856, 1895, 1949, 1959, 2301]
    llamb = [0.393, 0.349, 0.371, 0.384, 0.38, 0.370]
    rlamb = [0.433, 0.389, 0.411, 0.424, 0.427, 0.410]
    lsub = [0.88, 0.884, 0.884, 0.884, 0.884, 0.884]
    rsub = [0.89, 0.886, 0.886, 0.886, 0.886, 0.886]
    '''
    llrat = [0.25, 0.43, 0.3, 0.25, 0.25, 0.26]
    rlrat = [0.3, 0.53, 0.35, 0.3, 0.3, 0.32]
    ldep = [7, 8, 9, 7, 9, 9]
    rdep = [9, 10, 11, 10, 11, 11]
    lest = [450, 100, 240, 380, 480, 630]
    rest = [530, 170, 310, 470, 570, 700]
    llamb = [0.35, 0.26, 0.32, 0.17, 0.2, 0.2]
    rlamb = [0.4, 0.33, 0.4, 0.23, 0.28, 0.28]
    lsub = [0.88, 0.88, 0.88, 0.88, 0.88, 0.88]
    rsub = [0.886, 0.886, 0.886, 0.886, 0.886, 0.886]
    #                    (      Optuna)
    params = {
        'learning_rate': trial.suggest_float('learning_rate', llrat[3],␣
 ↪rlrat[3]),
        'max_depth': trial.suggest_int('max_depth', ldep[3], rdep[3]),
        'n_estimators': trial.suggest_int('n_estimators', lest[3], rest[3]),
        'reg_lambda': trial.suggest_float('reg_lambda', llamb[3], rlamb[3]),
```

```
        'subsample': trial.suggest_float('subsample', lsub[3], rsub[3]),
        #'colsample_bytree': trial.suggest_float('colsample_bytree', 0.85, 0.
↪95),
        #'gamma': trial.suggest_float('gamma', 0.01, 0.08),
        #'reg_alpha': trial.suggest_float('reg_alpha', 0.01, 0.06)
    }

    #
    model = XGBRegressor(**params)
    model.fit(X_train, y_train)

    #
    y_pred = model.predict(X_test)

    #            (    , MSE)
    mse = mean_squared_error(y_test, y_pred)
    mae = mean_absolute_error(y_test, y_pred)
    return mse
```

[ ]:
```
#
study = optuna.create_study(direction='minimize')  #       MSE

#            (        )
study.optimize(objective, n_trials=50)

#
best_params = study.best_params
```

```
[I 2024-08-30 19:35:52,131] A new study created in memory with name: no-
name-6f363b18-16c7-427e-8be2-614e10faa35f
[I 2024-08-30 19:35:53,954] Trial 0 finished with value: 0.010924747782061605
and parameters: {'learning_rate': 0.2654087178282604, 'max_depth': 7,
'n_estimators': 443, 'reg_lambda': 0.18710387526796318, 'subsample':
0.8806009472987973}. Best is trial 0 with value: 0.010924747782061605.
[I 2024-08-30 19:35:59,591] Trial 1 finished with value: 0.0093739429446437 and
parameters: {'learning_rate': 0.26705664894178005, 'max_depth': 8,
'n_estimators': 435, 'reg_lambda': 0.22060905704997585, 'subsample':
0.8808211535869432}. Best is trial 1 with value: 0.0093739429446437.
[I 2024-08-30 19:36:07,731] Trial 2 finished with value: 0.008461552093226068
and parameters: {'learning_rate': 0.2530845415706453, 'max_depth': 10,
'n_estimators': 386, 'reg_lambda': 0.18478229504362445, 'subsample':
0.8809179675561608}. Best is trial 2 with value: 0.008461552093226068.
[I 2024-08-30 19:36:21,941] Trial 3 finished with value: 0.009261844187658463
and parameters: {'learning_rate': 0.26805596730731573, 'max_depth': 8,
'n_estimators': 397, 'reg_lambda': 0.20050046775041996, 'subsample':
0.8817319312295961}. Best is trial 2 with value: 0.008461552093226068.
[I 2024-08-30 19:36:26,339] Trial 4 finished with value: 0.01146637730208291 and
```

```
parameters: {'learning_rate': 0.284586573452258, 'max_depth': 7, 'n_estimators':
393, 'reg_lambda': 0.17282104888739938, 'subsample': 0.8832310943970798}. Best
is trial 2 with value: 0.008461552093226068.
[I 2024-08-30 19:36:35,005] Trial 5 finished with value: 0.010284259274309464
and parameters: {'learning_rate': 0.29437994985237986, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.17494831397415084, 'subsample':
0.8848624150999063}. Best is trial 2 with value: 0.008461552093226068.
[I 2024-08-30 19:36:37,044] Trial 6 finished with value: 0.007104434799024892
and parameters: {'learning_rate': 0.2739710363443391, 'max_depth': 10,
'n_estimators': 419, 'reg_lambda': 0.18611292361758738, 'subsample':
0.8844881048850051}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:40,101] Trial 7 finished with value: 0.008856635725796454
and parameters: {'learning_rate': 0.2680281092650015, 'max_depth': 9,
'n_estimators': 465, 'reg_lambda': 0.21030961009848412, 'subsample':
0.8846050995125332}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:41,876] Trial 8 finished with value: 0.00917671647781273 and
parameters: {'learning_rate': 0.28943895236659145, 'max_depth': 9,
'n_estimators': 439, 'reg_lambda': 0.18986077418477806, 'subsample':
0.8831245091356299}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:42,271] Trial 9 finished with value: 0.009930354222574898
and parameters: {'learning_rate': 0.2717774615355901, 'max_depth': 10,
'n_estimators': 391, 'reg_lambda': 0.17922040447964085, 'subsample':
0.8853837706704427}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:42,648] Trial 10 finished with value: 0.0075610576629138145
and parameters: {'learning_rate': 0.2798554568585163, 'max_depth': 10,
'n_estimators': 413, 'reg_lambda': 0.22911795529580467, 'subsample':
0.8840758693254973}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:42,995] Trial 11 finished with value: 0.007749278389694682
and parameters: {'learning_rate': 0.2795740521620265, 'max_depth': 10,
'n_estimators': 413, 'reg_lambda': 0.22524511155382787, 'subsample':
0.8839251739704551}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:43,359] Trial 12 finished with value: 0.010117279853957953
and parameters: {'learning_rate': 0.2788572410901309, 'max_depth': 9,
'n_estimators': 415, 'reg_lambda': 0.19784398437411088, 'subsample':
0.8859750958623291}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:43,715] Trial 13 finished with value: 0.007445482584548338
and parameters: {'learning_rate': 0.25895607997633463, 'max_depth': 10,
'n_estimators': 416, 'reg_lambda': 0.21431458482253188, 'subsample':
0.8839691871611077}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:44,071] Trial 14 finished with value: 0.009849830095853256
and parameters: {'learning_rate': 0.2558042817692175, 'max_depth': 10,
'n_estimators': 420, 'reg_lambda': 0.21286548260207774, 'subsample':
0.882664082450819}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:44,445] Trial 15 finished with value: 0.010719637990833392
and parameters: {'learning_rate': 0.25988361621682804, 'max_depth': 9,
'n_estimators': 403, 'reg_lambda': 0.20175049391326633, 'subsample':
0.8821648658111718}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:44,817] Trial 16 finished with value: 0.00919599490775655
```

```
and parameters: {'learning_rate': 0.26123398263842756, 'max_depth': 10,
'n_estimators': 430, 'reg_lambda': 0.2109783357515823, 'subsample':
0.8837996829472399}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:46,356] Trial 17 finished with value: 0.008804189105198533
and parameters: {'learning_rate': 0.2515640400476949, 'max_depth': 9,
'n_estimators': 451, 'reg_lambda': 0.19513879037338377, 'subsample':
0.8848963871739008}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:47,907] Trial 18 finished with value: 0.009474196252932152
and parameters: {'learning_rate': 0.29951289176392126, 'max_depth': 10,
'n_estimators': 404, 'reg_lambda': 0.2192280193022382, 'subsample':
0.8857982995840936}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:49,679] Trial 19 finished with value: 0.009514542773133104
and parameters: {'learning_rate': 0.2748524956375456, 'max_depth': 9,
'n_estimators': 423, 'reg_lambda': 0.20446473410349533, 'subsample':
0.8843184769956957}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:50,110] Trial 20 finished with value: 0.008847729403214844
and parameters: {'learning_rate': 0.2601393529295786, 'max_depth': 10,
'n_estimators': 451, 'reg_lambda': 0.1927621331975577, 'subsample':
0.8835881364959969}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:50,444] Trial 21 finished with value: 0.008343571767011658
and parameters: {'learning_rate': 0.28418584151565807, 'max_depth': 10,
'n_estimators': 408, 'reg_lambda': 0.22997930896221602, 'subsample':
0.8841731760258729}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:50,830] Trial 22 finished with value: 0.009764559270119265
and parameters: {'learning_rate': 0.2794717205479234, 'max_depth': 10,
'n_estimators': 426, 'reg_lambda': 0.21783908957819886, 'subsample':
0.8852270016015525}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:51,198] Trial 23 finished with value: 0.0090194228107726 and
parameters: {'learning_rate': 0.27365656675608396, 'max_depth': 10,
'n_estimators': 414, 'reg_lambda': 0.2253273342885205, 'subsample':
0.8827525154433609}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:51,554] Trial 24 finished with value: 0.009742420120720461
and parameters: {'learning_rate': 0.2853440552004838, 'max_depth': 9,
'n_estimators': 419, 'reg_lambda': 0.20574772436970687, 'subsample':
0.8834500880090943}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:51,923] Trial 25 finished with value: 0.007831281343809086
and parameters: {'learning_rate': 0.2893241662135498, 'max_depth': 10,
'n_estimators': 381, 'reg_lambda': 0.22897190496481942, 'subsample':
0.8843589247243899}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:52,298] Trial 26 finished with value: 0.008248789064769274
and parameters: {'learning_rate': 0.271596268864598, 'max_depth': 9,
'n_estimators': 431, 'reg_lambda': 0.18138418102188614, 'subsample':
0.8823463377590242}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:52,634] Trial 27 finished with value: 0.00772588414196355
and parameters: {'learning_rate': 0.2774963935455032, 'max_depth': 10,
'n_estimators': 408, 'reg_lambda': 0.21518054120216368, 'subsample':
0.8839566500590568}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:53,034] Trial 28 finished with value: 0.010151836600993796
```

```
and parameters: {'learning_rate': 0.25678139854206883, 'max_depth': 8,
'n_estimators': 399, 'reg_lambda': 0.20821585506465212, 'subsample':
0.8851921741817873}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:53,454] Trial 29 finished with value: 0.010493678291074369
and parameters: {'learning_rate': 0.2641509234993288, 'max_depth': 7,
'n_estimators': 444, 'reg_lambda': 0.18467875691242458, 'subsample':
0.880252886674075}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:53,827] Trial 30 finished with value: 0.008551245185826397
and parameters: {'learning_rate': 0.26410556027049925, 'max_depth': 10,
'n_estimators': 426, 'reg_lambda': 0.2214831888326923, 'subsample':
0.8847093684421777}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:54,182] Trial 31 finished with value: 0.007711979193049128
and parameters: {'learning_rate': 0.2783430032099744, 'max_depth': 10,
'n_estimators': 409, 'reg_lambda': 0.21522641969014758, 'subsample':
0.8840225328931028}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:54,526] Trial 32 finished with value: 0.008433376322451884
and parameters: {'learning_rate': 0.2826406191009138, 'max_depth': 10,
'n_estimators': 409, 'reg_lambda': 0.2234959664891378, 'subsample':
0.8835293693523842}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:54,910] Trial 33 finished with value: 0.00763701147478389
and parameters: {'learning_rate': 0.2704328884740044, 'max_depth': 10,
'n_estimators': 415, 'reg_lambda': 0.21672349833130541, 'subsample':
0.8843452709407585}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:55,284] Trial 34 finished with value: 0.007974982987375924
and parameters: {'learning_rate': 0.2703285064420364, 'max_depth': 10,
'n_estimators': 418, 'reg_lambda': 0.21662971206967335, 'subsample':
0.8845590647590541}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:55,649] Trial 35 finished with value: 0.009719079896328085
and parameters: {'learning_rate': 0.269216292455117, 'max_depth': 9,
'n_estimators': 430, 'reg_lambda': 0.22718663471124384, 'subsample':
0.8855635667089669}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:56,039] Trial 36 finished with value: 0.008289783266230305
and parameters: {'learning_rate': 0.2736566523230597, 'max_depth': 10,
'n_estimators': 401, 'reg_lambda': 0.22228954434035003, 'subsample':
0.8849652913504874}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:56,399] Trial 37 finished with value: 0.008918088363091487
and parameters: {'learning_rate': 0.26692521117827894, 'max_depth': 10,
'n_estimators': 394, 'reg_lambda': 0.18923797674018067, 'subsample':
0.8815388880489836}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:56,770] Trial 38 finished with value: 0.011361189719523318
and parameters: {'learning_rate': 0.2753380119945736, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.1702207495351706, 'subsample':
0.8831842709237181}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:57,158] Trial 39 finished with value: 0.00944415646479923
and parameters: {'learning_rate': 0.28891552588038055, 'max_depth': 9,
'n_estimators': 436, 'reg_lambda': 0.20386902268647944, 'subsample':
0.8844308962544603}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:57,549] Trial 40 finished with value: 0.011463943382755408
```

```
and parameters: {'learning_rate': 0.2818482503716183, 'max_depth': 7,
'n_estimators': 413, 'reg_lambda': 0.2084403936271486, 'subsample':
0.88364802391694}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:57,894] Trial 41 finished with value: 0.007162142728711471
and parameters: {'learning_rate': 0.27678044989040607, 'max_depth': 10,
'n_estimators': 406, 'reg_lambda': 0.215246200383288, 'subsample':
0.8841118095908328}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:58,290] Trial 42 finished with value: 0.008799602299228645
and parameters: {'learning_rate': 0.2768533927709255, 'max_depth': 10,
'n_estimators': 417, 'reg_lambda': 0.2123170482176539, 'subsample':
0.884121166900124}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:58,649] Trial 43 finished with value: 0.009752569475403806
and parameters: {'learning_rate': 0.2655756858977131, 'max_depth': 10,
'n_estimators': 411, 'reg_lambda': 0.19805739546753037, 'subsample':
0.8828962352712518}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:58,985] Trial 44 finished with value: 0.008614340869096907
and parameters: {'learning_rate': 0.281424231859179, 'max_depth': 10,
'n_estimators': 388, 'reg_lambda': 0.219915719028668, 'subsample':
0.8833314399246207}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:59,353] Trial 45 finished with value: 0.008272487024169687
and parameters: {'learning_rate': 0.28641241413535695, 'max_depth': 10,
'n_estimators': 397, 'reg_lambda': 0.17731434497943901, 'subsample':
0.8847196109672434}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:36:59,828] Trial 46 finished with value: 0.009097216950370813
and parameters: {'learning_rate': 0.25473562449005455, 'max_depth': 9,
'n_estimators': 404, 'reg_lambda': 0.21417577856277334, 'subsample':
0.8837982207318971}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:37:01,179] Trial 47 finished with value: 0.007617446967413279
and parameters: {'learning_rate': 0.27280673670214994, 'max_depth': 10,
'n_estimators': 405, 'reg_lambda': 0.2008379820917257, 'subsample':
0.8851098997783421}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:37:02,775] Trial 48 finished with value: 0.01020759408302529
and parameters: {'learning_rate': 0.2931735234305544, 'max_depth': 10,
'n_estimators': 405, 'reg_lambda': 0.20047221767211998, 'subsample':
0.8851449746578764}. Best is trial 6 with value: 0.007104434799024892.
[I 2024-08-30 19:37:04,395] Trial 49 finished with value: 0.0077667009948078816
and parameters: {'learning_rate': 0.2729440650141265, 'max_depth': 10,
'n_estimators': 421, 'reg_lambda': 0.19446178171384654, 'subsample':
0.8849522061769838}. Best is trial 6 with value: 0.007104434799024892.
```

[ ]:
```
fig = optuna.visualization.plot_slice(study)
fig.show()
fig = optuna.visualization.plot_contour(study, params=["learning_rate",␣
  ↪"n_estimators"])
fig.show()
```

[ ]:
```
best_model = XGBRegressor(**best_params)
best_model.fit(X_train, y_train)
y_pred = best_model.predict(X_test)

#
print("         :", best_params)
print("    MSE:", study.best_value)

#         : {'learning_rate': 0.3182949958253294, 'max_depth': 10,␣
 ↪'n_estimators': 407, 'reg_lambda': 0.2742862547914231, 'subsample': 0.
 ↪8825848522066012}
#    MSE: 0.006891363690823102 in 6 10 6 * 9 14
#         : {'learning_rate': 0.3994365597578713, 'max_depth': 11,␣
 ↪'n_estimators': 558, 'reg_lambda': 0.39225250388649985, 'subsample': 0.
 ↪8866179858479619}
#    MSE: 0.006627326096072932 in 1 6 8 *** 11 13
#         : {'learning_rate': 0.3355703458527617, 'max_depth': 9,␣
 ↪'n_estimators': 636, 'reg_lambda': 0.4490532882539572, 'subsample': 0.
 ↪9621801025217974}
#    MSE: 0.00786367578690096 in 3 9 9 * 13 13
#         : {'learning_rate': 0.30783611682175427, 'max_depth': 10,␣
 ↪'n_estimators': 636, 'reg_lambda': 0.4134393145737115, 'subsample': 0.
 ↪8847262850015434}
#    MSE: 0.007121910764723661 in 3 8 10 * 9 12 +


#         : {'learning_rate': 0.3397765711907539, 'max_depth': 10,␣
 ↪'n_estimators': 1836, 'reg_lambda': 0.3691992127987541, 'subsample': 0.
 ↪8844566726152161}
#    MSE: 0.00733613539109482 in 5 8 9 * 9 12 +
#         : {'learning_rate': 0.3284016550206801, 'max_depth': 10,␣
 ↪'n_estimators': 2195, 'reg_lambda': 0.3727446185612196, 'subsample': 0.
 ↪8846373746982938}
#    MSE: 0.007152110410405082 in 3 9 9 ** 9 13
#         : {'learning_rate': 0.3211186799575672, 'max_depth': 10,␣
 ↪'n_estimators': 1877, 'reg_lambda': 0.39135729674424685, 'subsample': 0.
 ↪8857549212608521}
#    MSE: 0.006967277988112154 in 2 7 8 * 8 11 + if 66
#         : {'learning_rate': 0.3592447124553403 4, 'max_depth': 10,␣
 ↪'n_estimators': 1949, 'reg_lambda': 0.4045864516634997, 'subsample': 0.
 ↪884782783158045 1}
#    MSE: 0.006775318865764842 in 2 5 7 *** 7 12 +
#         : {'learning_rate': 0.3601054180113842, 'max_depth': 10,␣
 ↪'n_estimators': 1939, 'reg_lambda': 0.4069343730824307, 'subsample': 0.
 ↪8846860977112866}
#    MSE: 0.006737210201676588 in 2 6 8 ** 8 11 +
```

```
#         : {'learning_rate': 0.3573374047773028, 'max_depth': 11,␣
 ↪'n_estimators': 2281, 'reg_lambda': 0.3900003547708684, 'subsample': 0.
 ↪8858256502901554}
#    MSE: 0.0068440557464229295 in 3 5 6 ** 7 12 +

'''
llrat = [0.298, 0.358, 0.379, 0.315, 0.287, 0.319, 0.308, 0.301, 0.339, 0.340,␣
 ↪0.337]
rlrat = [0.338, 0.398, 0.419, 0.355, 0.327, 0.359, 0.348, 0.341, 0.379, 0.380,␣
 ↪0.377]
ldep = [9, 10, 10, 8, 9, 9, 9, 9, 9, 9, 10]
rdep = [11, 12, 12, 10, 11, 11, 11, 11, 11, 11, 12]
lest = [377, 480, 538, 616, 616, 1816, 2175, 1855, 1929, 1919, 2261]
rest = [417, 520, 578, 656, 660, 1856, 2215, 1895, 1949, 1959, 2301]
llamb = [0.254, 0.206, 0.372, 0.429, 0.393, 0.349, 0.352, 0.371, 0.384, 0.387,␣
 ↪0.370]
rlamb = [0.294, 0.246, 0.412, 0.469, 0.433, 0.389, 0.392, 0.411, 0.424, 0.427,␣
 ↪0.410]
lsub = [0.88, 0.88, 0.88, 0.88, 0.88, 0.884, 0.884, 0.884, 0.884, 0.884, 0.884]
rsub = [0.89, 0.89, 0.89, 0.97, 0.89, 0.886, 0.886, 0.886, 0.886, 0.886, 0.886]
'''

#         : {'learning_rate': 0.27445445590811335, 'max_depth': 8,␣
 ↪'n_estimators': 496, 'reg_lambda': 0.3730614994956989, 'subsample': 0.
 ↪8816430889479492}
#    MSE: 0.006902758573655119 in 8 10 **
#         : {'learning_rate': 0.4958928932294147, 'max_depth': 9,␣
 ↪'n_estimators': 116, 'reg_lambda': 0.32633912343268673, 'subsample': 0.
 ↪8855036865063138}
#    MSE: 0.007925420176050023 in 9 10 *
#         : {'learning_rate': 0.3296230266116008, 'max_depth': 10,␣
 ↪'n_estimators': 287, 'reg_lambda': 0.37756947287811185, 'subsample': 0.
 ↪8848977322876512}
#    MSE: 0.006916366010920374 in 9 13 *
#         : {'learning_rate': 0.2789699764501914, 'max_depth': 10,␣
 ↪'n_estimators': 427, 'reg_lambda': 0.20673125613500598, 'subsample': 0.
 ↪8829012963557951}
#    MSE: 0.006352706140367311 in 8 11 ** 25 33 8 11 370 500 0.15 0.25 88 886
#         : {'learning_rate': 0.2856104924349824, 'max_depth': 10,␣
 ↪'n_estimators': 510, 'reg_lambda': 0.23793824031193395, 'subsample': 0.
 ↪8833232256381509}
#    MSE: 0.006578314092417606 in 9 12 * 25 37 8 11 450 550 15 25 88 886
#         : {'learning_rate': 0.28145983271951397, 'max_depth': 10,␣
 ↪'n_estimators': 652, 'reg_lambda': 0.22113306297386875, 'subsample': 0.
 ↪8840681120077459}
#    MSE: 0.006465865244146952 in 9 11
```

```
        : {'learning_rate': 0.2739710363443391, 'max_depth': 10,
'n_estimators': 419, 'reg_lambda': 0.18611292361758738, 'subsample':
0.8844881048850051}
    MSE: 0.007104434799024892
```

[ ]:
```
'\nllrat = [0.298, 0.358, 0.379, 0.315, 0.287, 0.319, 0.308, 0.301, 0.339,
0.340, 0.337]\nrlrat = [0.338, 0.398, 0.419, 0.355, 0.327, 0.359, 0.348, 0.341,
0.379, 0.380, 0.377]\nldep = [9, 10, 10, 8, 9, 9, 9, 9, 9, 9, 10]\nrdep = [11,
12, 12, 10, 11, 11, 11, 11, 11, 11, 12]\nlest = [377, 480, 538, 616, 616, 1816,
2175, 1855, 1929, 1919, 2261]\nrest = [417, 520, 578, 656, 660, 1856, 2215,
1895, 1949, 1959, 2301]\nllamb = [0.254, 0.206, 0.372, 0.429, 0.393, 0.349,
0.352, 0.371, 0.384, 0.387, 0.370]\nrlamb = [0.294, 0.246, 0.412, 0.469, 0.433,
0.389, 0.392, 0.411, 0.424, 0.427, 0.410]\nlsub = [0.88, 0.88, 0.88, 0.88, 0.88,
0.884, 0.884, 0.884, 0.884, 0.884, 0.884]\nrsub = [0.89, 0.89, 0.89, 0.97, 0.89,
0.886, 0.886, 0.886, 0.886, 0.886, 0.886]\n'
```

[ ]:
```
# TEST PREDICTION

# Split data first
split_dateSm = pd.to_datetime( '2024-02-29' )
upper_boundary = pd.to_datetime( '2024-05-31' )
train_dfSm = df_forFCST[ df_forFCST.index <= split_dateSm ]
valid_dfSm = df_forFCST[ ( df_forFCST.index > split_dateSm ) & ( df_forFCST.
 ↪index <= upper_boundary ) ]

# max_mix = df_forFCST[ df_forFCST.index <= split_dateSm ]['y_mix'].max()
max_mix = 679.8297498652444
train_dfSm = add_features( train_dfSm, max_mix )
valid_dfSm = add_features( valid_dfSm, max_mix )

# Form numpy arrays
time_trainSm = np.array( train_dfSm.reset_index()['ds'] )
x_trainSm = np.array( train_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'Close']] )

time_validSm = np.array( valid_dfSm.reset_index()['ds'])
x_validSm = np.array( valid_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'Close']] )


results = y_pred
forecast_date = pd.to_datetime(time_validSm[0])
month_num = forecast_date.month / 12
day_of_week = forecast_date.dayofweek / 6
day_of_month = forecast_date.day / 31
```

```
data = np.array( [ y_test  * max_mix, results * max_mix ] ).T

df_result = pd.DataFrame( data = data, index = time_validSm,
                          columns = [ "x_valid", "prediction"] )
df_resultGR = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
p_error = np.abs( np.array( df_resultGR["x_valid"] ) - ( np.array(␣
 ↪df_resultGR['prediction'] ) ) ) \
    / np.array( df_resultGR["x_valid"] )

df_resultGR = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
df_resultGR['a_error'] = np.abs( np.round( \
    np.array( df_resultGR["x_valid"] ) \
    - np.array( df_resultGR['prediction'] ), 0 ) )
df_resultGR['p_error'] = np.round( ( np.array( df_resultGR["x_valid"] ) \
    -  np.array( df_resultGR['prediction'] ) ) \
    / np.array( df_resultGR["x_valid"] ), 2 )

df_resultGR
```

[ ]:

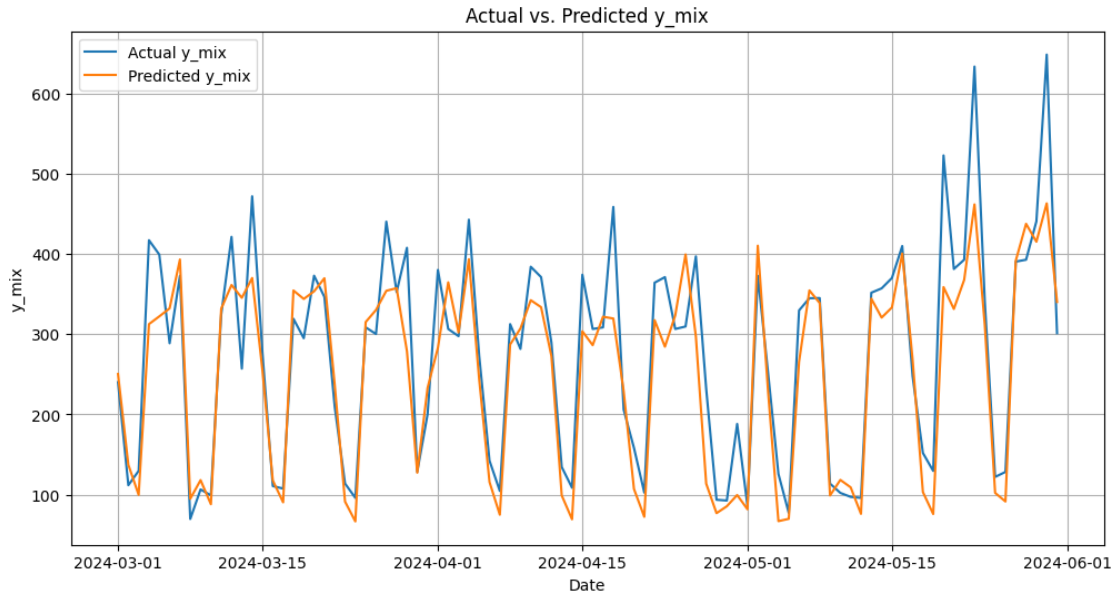
	x_valid	prediction	a_error	p_error
2024-03-31	8098.406273	7835.221329	263.0	0.03
2024-04-30	8102.309590	7129.193398	973.0	0.12
2024-05-31	9059.598005	8141.241928	918.0	0.10

[ ]:
```
plt.figure(figsize=(12, 6))

# Plot actual sales values
plt.plot(X_test.index, y_test * max_mix, label='Actual y_mix')

# Plot predicted sales values
plt.plot(X_test.index, y_pred * max_mix, label='Predicted y_mix')


plt.xlabel('Date')
plt.ylabel('y_mix')
plt.title('Actual vs. Predicted y_mix')
plt.legend()
plt.grid(True)
plt.show()
print(X_test)
print(y_test)
```



ds	month_number	day_of_week	day_of_month	Close	is_holiday
2024-03-01	0.250000	0.666667	0.032258	0.603407	0
2024-03-02	0.250000	0.833333	0.064516	0.603407	0
2024-03-03	0.250000	1.000000	0.096774	0.603407	0
2024-03-04	0.250000	0.000000	0.129032	0.601179	0
2024-03-05	0.250000	0.166667	0.161290	0.597251	0
…	…	…	…	…	…
2024-05-27	0.416667	0.000000	0.870968	0.583352	0
2024-05-28	0.416667	0.166667	0.903226	0.581544	0
2024-05-29	0.416667	0.333333	0.935484	0.588775	0
2024-05-30	0.416667	0.500000	0.967742	0.591733	0
2024-05-31	0.416667	0.666667	1.000000	0.594033	0

[92 rows x 5 columns]

ds	
2024-03-01	0.353514
2024-03-02	0.164353
2024-03-03	0.190711
2024-03-04	0.613997
2024-03-05	0.587639
…	
2024-05-27	0.574696
2024-05-28	0.578184
2024-05-29	0.648639
2024-05-30	0.954636
2024-05-31	0.443420

Name: y_mix, Length: 92, dtype: float64

[ ]:
```
# Split data first
split_dateSm1 = pd.to_datetime( '2024-04-30' )
train_dfSm1 = df_forFCST[ df_forFCST.index <= split_dateSm ]
#valid_dfSm = df_forFCST[ df_forFCST.index > split_dateSm ]


max_mix1 = df_forFCST[ df_forFCST.index <= split_dateSm1 ]['y_mix'].max()
train_dfSm1 = add_features( train_dfSm1, max_mix1 )
#valid_dfSm = add_features( valid_dfSm, max_mix )

# Form numpy arrays
time_trainSm1 = np.array( train_dfSm1.reset_index()['ds'] )
x_trainSm1 = np.array( train_dfSm1[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'is_holiday']] )

#time_validSm = np.array( valid_dfSm.reset_index()['ds'])
#x_validSm = np.array( valid_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month']] )
print(len(x_trainSm1))

features1 = ['month_number', 'day_of_week', 'day_of_month', 'Close',␣
 ↪'is_holiday']
target1 = 'y_mix'

# Prepare data for XGBoost
dateSm1 = add_features( df_forFCST, max_mix1 )

X = dateSm1[features]
y = dateSm1[target]

split_dateSm1 = pd.to_datetime( '2024-04-30' )
ltrain_dfSm1 = df_forFCST[ df_forFCST.index <= split_dateSm1 ]

date_max_mix1 = len(ltrain_dfSm1)

# Split data into training and testing sets (adjust test_size as needed)
X_train1, X_test1, y_train1, y_test1 = train_test_split(X, y, test_size= 1 -␣
 ↪(date_max_mix1 / len(df_forFCST)), shuffle=False)
print(X_test1)
```

```
1886
            month_number  day_of_week  day_of_month     Close  is_holiday
ds
2024-05-01      0.416667     0.333333      0.032258  0.614409           1
2024-05-02      0.416667     0.500000      0.064516  0.607821           0
2024-05-03      0.416667     0.666667      0.096774  0.604550           0
2024-05-04      0.416667     0.833333      0.129032  0.604550           0
```

```
2024-05-05      0.416667     1.000000      0.161290  0.604550          0
…                    …            …             …         …          …
2024-07-27      0.583333     0.833333      0.870968  0.565934          0
2024-07-28      0.583333     1.000000      0.903226  0.565934          0
2024-07-29      0.583333     0.000000      0.935484  0.569549          0
2024-07-30      0.583333     0.166667      0.967742  0.569220          0
2024-07-31      0.583333     0.333333      1.000000  0.564956          0

[92 rows x 5 columns]
```

[ ]:
```
# TEST PREDICTION

y_pred1 = best_model.predict(X_test1)

# Split data first
split_dateSm1 = pd.to_datetime( '2024-04-30' )
upper_boundary1 = pd.to_datetime( '2024-07-31' )
train_dfSm1 = df_forFCST[ df_forFCST.index <= split_dateSm1 ]
valid_dfSm1 = df_forFCST[ ( df_forFCST.index > split_dateSm1 ) & ( df_forFCST.
 ↪index <= upper_boundary1 ) ]

# max_mix = df_forFCST[ df_forFCST.index <= split_dateSm ]['y_mix'].max()
max_mix1 = 679.8297498652444
train_dfSm1 = add_features( train_dfSm1, max_mix1 )
valid_dfSm1 = add_features( valid_dfSm1, max_mix1 )

# Form numpy arrays
time_trainSm1 = np.array( train_dfSm1.reset_index()['ds'] )
x_trainSm1 = np.array( train_dfSm1[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'Close']] )

time_validSm1 = np.array( valid_dfSm1.reset_index()['ds'])
x_validSm1 = np.array( valid_dfSm1[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'Close']] )


results1 = y_pred1
forecast_date1 = pd.to_datetime(time_validSm1[0])
month_num1 = forecast_date1.month / 12
day_of_week1 = forecast_date1.dayofweek / 6
day_of_month1 = forecast_date1.day / 31


data = np.array( [ y_test1  * max_mix1, results1 * max_mix1 ] ).T

df_result = pd.DataFrame( data = data, index = time_validSm1,
                          columns = [ "x_valid", "prediction"] )
```

```
df_resultGR1 = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
p_error = np.abs( np.array( df_resultGR1["x_valid"] ) - ( np.array(␣
 ↪df_resultGR1['prediction'] ) ) ) \
    / np.array( df_resultGR1["x_valid"] )

df_resultGR1 = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
df_resultGR1['a_error'] = np.abs( np.round( \
    np.array( df_resultGR1["x_valid"] ) \
    - np.array( df_resultGR1['prediction'] ), 0 ) )
df_resultGR1['p_error'] = np.round( ( np.array( df_resultGR1["x_valid"] ) \
    -  np.array( df_resultGR1['prediction'] ) ) \
    / np.array( df_resultGR1["x_valid"] ), 2 )

df_resultGR1
```

[ ]:

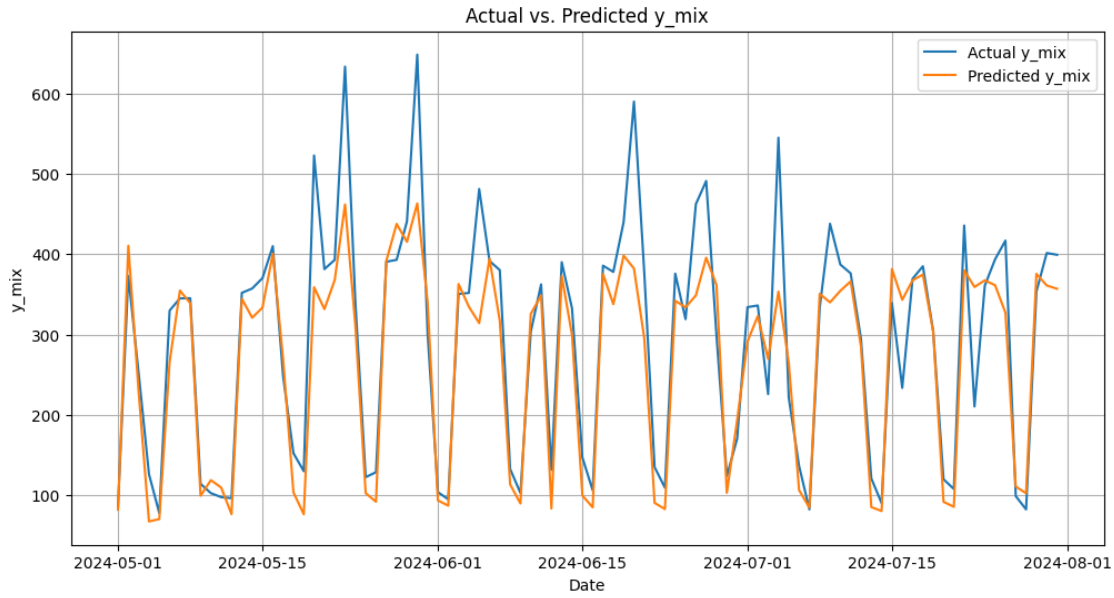
	x_valid	prediction	a_error	p_error
2024-05-31	9059.598005	8141.241928	918.0	0.10
2024-06-30	8816.616542	7757.226624	1059.0	0.12
2024-07-31	8930.788554	8600.621086	330.0	0.04

[ ]:
```
plt.figure(figsize=(12, 6))

# Plot actual sales values
plt.plot(X_test1.index, y_test1 * max_mix, label='Actual y_mix')

# Plot predicted sales values
plt.plot(X_test1.index, y_pred1 * max_mix, label='Predicted y_mix')


plt.xlabel('Date')
plt.ylabel('y_mix')
plt.title('Actual vs. Predicted y_mix')
plt.legend()
plt.grid(True)
plt.show()
print(X_test)
print(y_test)
```



ds	month_number	day_of_week	day_of_month	Close	is_holiday
2024-03-01	0.250000	0.666667	0.032258	0.603407	0
2024-03-02	0.250000	0.833333	0.064516	0.603407	0
2024-03-03	0.250000	1.000000	0.096774	0.603407	0
2024-03-04	0.250000	0.000000	0.129032	0.601179	0
2024-03-05	0.250000	0.166667	0.161290	0.597251	0
…	…	…	…	…	
2024-05-27	0.416667	0.000000	0.870968	0.583352	0
2024-05-28	0.416667	0.166667	0.903226	0.581544	0
2024-05-29	0.416667	0.333333	0.935484	0.588775	0
2024-05-30	0.416667	0.500000	0.967742	0.591733	0
2024-05-31	0.416667	0.666667	1.000000	0.594033	0

[92 rows x 5 columns]

```
ds
2024-03-01    0.353514
2024-03-02    0.164353
2024-03-03    0.190711
2024-03-04    0.613997
2024-03-05    0.587639
                …
2024-05-27    0.574696
2024-05-28    0.578184
2024-05-29    0.648639
2024-05-30    0.954636
2024-05-31    0.443420
Name: y_mix, Length: 92, dtype: float64
```

3

There are 6 models we take average of 2 median results for each month

[ ]:
```
# Split data first
split_dateSm = pd.to_datetime( '2024-04-30' )
train_dfSm = df_forFCST[ df_forFCST.index <= split_dateSm ]
valid_dfSm = df_forFCST[ df_forFCST.index > split_dateSm ]


max_mix = df_forFCST[ df_forFCST.index <= split_dateSm ]['y_mix'].max()
train_dfSm = add_features( train_dfSm, max_mix )
valid_dfSm = add_features( valid_dfSm, max_mix )

# Form numpy arrays
time_trainSm = np.array( train_dfSm.reset_index()['ds'] )
x_trainSm = np.array( train_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month', 'is_holiday', 'Close']] )

time_validSm = np.array( valid_dfSm.reset_index()['ds'])
#x_validSm = np.array( valid_dfSm[['y_mix', 'month_number', 'day_of_week',␣
 ↪'day_of_month']] )
print(len(x_trainSm))


features = ['month_number', 'day_of_week', 'day_of_month', 'is_holiday',␣
 ↪'Close']
target = 'y_mix'

# Prepare data for XGBoost
dateSm = add_features( df_forFCST, max_mix )

X = dateSm[features]
y = dateSm[target]

split_dateSm = pd.to_datetime( '2024-04-30' )
ltrain_dfSm = df_forFCST[ df_forFCST.index <= split_dateSm ]

date_max_mix = len(ltrain_dfSm)

# Split data into training and testing sets (adjust test_size as needed)
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size= 1 -␣
 ↪(date_max_mix / len(df_forFCST)), shuffle=False)
print(X_test)
print(X_train)

def objective(trial: Trial) -> float:
```

```
    """             Optuna."""
    '''

    llrat = [0.298, 0.358, 0.379, 0.315, 0.287, 0.319, 0.308, 0.301, 0.339, 0.
↪340, 0.337]
    rlrat = [0.338, 0.398, 0.419, 0.355, 0.327, 0.359, 0.348, 0.341, 0.379, 0.
↪380, 0.377]
    ldep = [9, 10, 10, 8, 9, 9, 9, 9, 9, 9, 10]
    rdep = [11, 12, 12, 10, 11, 11, 11, 11, 11, 11, 12]
    lest = [377, 480, 538, 616, 616, 1816, 2175, 1855, 1929, 1919, 2261]
    rest = [417, 520, 578, 656, 660, 1856, 2215, 1895, 1949, 1959, 2301]
    llamb = [0.254, 0.206, 0.372, 0.429, 0.393, 0.349, 0.352, 0.371, 0.384, 0.
↪387, 0.370]
    rlamb = [0.294, 0.246, 0.412, 0.469, 0.433, 0.389, 0.392, 0.411, 0.424, 0.
↪427, 0.410]
    lsub = [0.88, 0.88, 0.88, 0.88, 0.88, 0.884, 0.884, 0.884, 0.884, 0.884, 0.
↪884]
    rsub = [0.89, 0.89, 0.89, 0.97, 0.89, 0.886, 0.886, 0.886, 0.886, 0.886, 0.
↪886]
    '''
    llrat = [0.25, 0.43, 0.3, 0.28, 0.25, 0.26]
    rlrat = [0.3, 0.53, 0.35, 0.33, 0.3, 0.32]
    ldep = [7, 8, 9, 7, 9, 9]
    rdep = [9, 10, 11, 10, 11, 11]
    lest = [450, 100, 240, 420, 480, 630]
    rest = [530, 170, 310, 500, 570, 700]
    llamb = [0.35, 0.26, 0.32, 0.19, 0.2, 0.2]
    rlamb = [0.4, 0.33, 0.4, 0.23, 0.28, 0.28]
    lsub = [0.88, 0.88, 0.88, 0.88, 0.88, 0.88]
    rsub = [0.886, 0.886, 0.886, 0.886, 0.886, 0.886]

    #                   (      Optuna)
    params = {
        'learning_rate': trial.suggest_float('learning_rate', llrat[i],␣
↪rlrat[i]),
        'max_depth': trial.suggest_int('max_depth', ldep[i], rdep[i]),
        'n_estimators': trial.suggest_int('n_estimators', lest[i], rest[i]),
        'reg_lambda': trial.suggest_float('reg_lambda', llamb[i], rlamb[i]),
        'subsample': trial.suggest_float('subsample', lsub[i], rsub[i]),
        #'colsample_bytree': trial.suggest_float('colsample_bytree', 0.85, 0.
↪95),
        #'gamma': trial.suggest_float('gamma', 0.01, 0.08),
        #'reg_alpha': trial.suggest_float('reg_alpha', 0.01, 0.06)
    }

    #
```

```
    model = XGBRegressor(**params)
    model.fit(X_train, y_train)

    #
    y_pred = model.predict(X_test)

    #            (    , MSE)
    mse = mean_squared_error(y_test, y_pred)
    mae = mean_absolute_error(y_test, y_pred)
    return mse

for i in range(6):
    #
    study = optuna.create_study(direction='minimize')  #        MSE

    #             (         )
    study.optimize(objective, n_trials=600)

    #
    best_params = study.best_params

    #
    best_model = XGBRegressor(**best_params)
    best_model.fit(X_train, y_train)
    y_pred = best_model.predict(X_test)

    #
    print(f"             i={i}:", best_params)
    print(f"    MSE    i={i}:", study.best_value)


    results = y_pred
    forecast_date = pd.to_datetime(time_validSm[0])
    month_num = forecast_date.month / 12
    day_of_week = forecast_date.dayofweek / 6
    day_of_month = forecast_date.day / 31


    data = np.array( [ y_test  * max_mix, results * max_mix ] ).T

    df_result = pd.DataFrame( data = data, index = time_validSm,
                              columns = [ "x_valid", "prediction"] )
    df_resultGR = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
    p_error = np.abs( np.array( df_resultGR["x_valid"] ) - ( np.array(␣
 ↪df_resultGR['prediction'] ) ) ) \
          / np.array( df_resultGR["x_valid"] )
```

```
    df_resultGR = df_result.groupby( pd.Grouper( freq = "M" ) ).sum()
    df_resultGR['a_error'] = np.abs( np.round( \
        np.array( df_resultGR["x_valid"] ) \
        - np.array( df_resultGR['prediction'] ), 0 ) )
    df_resultGR['p_error'] = np.round( ( np.array( df_resultGR["x_valid"] ) \
        -  np.array( df_resultGR['prediction'] ) ) \
        / np.array( df_resultGR["x_valid"] ), 2 )

    print(df_resultGR["x_valid"].values, df_resultGR['prediction'].values,␣
 ↪df_resultGR["p_error"].values)
    print("------------------------")
    fig = optuna.visualization.plot_slice(study)
    fig.show()
#9 81- 10 76+              8 66-+ 10 77+-       13 72-- 67 10++          11 79+-␣
 ↪10 76-+     10 78-+ 11 72+-       11 77+ 11 70+-
#300trials:  75 5 11 7-22        73 10 7 6-23         71 8 8  2-18           ␣
 ↪77 11 10 0-21       73 8 11 2-21          72 9 11 2-22
#800trials:  73 7 7 1-15         66 6  9 5-20         68 12 9 4-25           ␣
 ↪77 7 10 0-17        73 10 8 0-18          69 10 11 2-23     8.5 9 1.5
#800trials:  74 11 12 1-24       80 9 10 3-22         68 8 11 2-21           ␣
 ↪76 9 10 3-22        74 12 11 2-25         75 8 10 3-21      9 10.5 2.5
#1500trials: 74 7 11 6-24        70 7 5 6-18          62 7 11 2-20           ␣
 ↪73 8 9 4-21         71 9 10 3-22          71 8 10 4-22      7.5 10 4
```

```
[I 2024-08-30 19:37:06,015] A new study created in memory with name: no-
name-b1078ef2-33f2-4e48-a539-ae7157c68610
```

```
1947
            month_number  day_of_week  day_of_month  is_holiday     Close
ds
2024-05-01      0.416667     0.333333      0.032258           1  0.614409
2024-05-02      0.416667     0.500000      0.064516           0  0.607821
2024-05-03      0.416667     0.666667      0.096774           0  0.604550
2024-05-04      0.416667     0.833333      0.129032           0  0.604550
2024-05-05      0.416667     1.000000      0.161290           0  0.604550
…                    …            …             …           …        …
2024-07-27      0.583333     0.833333      0.870968           0  0.565934
2024-07-28      0.583333     1.000000      0.903226           0  0.565934
2024-07-29      0.583333     0.000000      0.935484           0  0.569549
2024-07-30      0.583333     0.166667      0.967742           0  0.569220
2024-07-31      0.583333     0.333333      1.000000           0  0.564956

[92 rows x 5 columns]
            month_number  day_of_week  day_of_month  is_holiday     Close
ds
2019-01-01      0.083333     0.166667      0.032258           1       NaN
2019-01-02      0.083333     0.333333      0.064516           1       NaN
```

```
2019-01-03      0.083333     0.500000      0.096774           1  0.451881
2019-01-04      0.083333     0.666667      0.129032           1  0.444861
2019-01-05      0.083333     0.833333      0.161290           1  0.444861
…                  …            …             …          …       …
2024-04-26      0.333333     0.666667      0.838710           0  0.607672
2024-04-27      0.333333     0.833333      0.870968           0  0.607672
2024-04-28      0.333333     1.000000      0.903226           0  0.607672
2024-04-29      0.333333     0.000000      0.935484           1  0.611458
2024-04-30      0.333333     0.166667      0.967742           1  0.614409

[1947 rows x 5 columns]
```

```
[I 2024-08-30 19:37:06,363] Trial 0 finished with value: 0.010146201055918746
and parameters: {'learning_rate': 0.29771129423132064, 'max_depth': 9,
'n_estimators': 463, 'reg_lambda': 0.37118538046014843, 'subsample':
0.8813720566027773}. Best is trial 0 with value: 0.010146201055918746.
[I 2024-08-30 19:37:06,905] Trial 1 finished with value: 0.010022760088021677
and parameters: {'learning_rate': 0.29237999329873, 'max_depth': 7,
'n_estimators': 492, 'reg_lambda': 0.37447988571333085, 'subsample':
0.8833865374681319}. Best is trial 1 with value: 0.010022760088021677.
[I 2024-08-30 19:37:07,293] Trial 2 finished with value: 0.01043097559923449 and
parameters: {'learning_rate': 0.2703151967243633, 'max_depth': 9,
'n_estimators': 518, 'reg_lambda': 0.36378571460048, 'subsample':
0.8847133495104019}. Best is trial 1 with value: 0.010022760088021677.
[I 2024-08-30 19:37:07,736] Trial 3 finished with value: 0.010160371630618973
and parameters: {'learning_rate': 0.25488848778566936, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.36579840096244354, 'subsample':
0.8818777182728813}. Best is trial 1 with value: 0.010022760088021677.
[I 2024-08-30 19:37:08,087] Trial 4 finished with value: 0.00985300565730149 and
parameters: {'learning_rate': 0.2586300287405183, 'max_depth': 9,
'n_estimators': 502, 'reg_lambda': 0.3565771688882899, 'subsample':
0.8839913783090104}. Best is trial 4 with value: 0.00985300565730149.
[I 2024-08-30 19:37:08,517] Trial 5 finished with value: 0.010537557388586452
and parameters: {'learning_rate': 0.2588316540339085, 'max_depth': 7,
'n_estimators': 524, 'reg_lambda': 0.38676815319653973, 'subsample':
0.8839644267364885}. Best is trial 4 with value: 0.00985300565730149.
[I 2024-08-30 19:37:08,869] Trial 6 finished with value: 0.010792335554451082
and parameters: {'learning_rate': 0.2677011456685677, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.37958215843112464, 'subsample':
0.8826722133191007}. Best is trial 4 with value: 0.00985300565730149.
[I 2024-08-30 19:37:09,215] Trial 7 finished with value: 0.009970468413330182
and parameters: {'learning_rate': 0.27191566300954295, 'max_depth': 9,
'n_estimators': 497, 'reg_lambda': 0.3501006443798733, 'subsample':
0.883229122370964}. Best is trial 4 with value: 0.00985300565730149.
[I 2024-08-30 19:37:09,566] Trial 8 finished with value: 0.008128024749047167
and parameters: {'learning_rate': 0.2826798702142278, 'max_depth': 9,
'n_estimators': 477, 'reg_lambda': 0.388709081856121, 'subsample':
0.8818431931387541}. Best is trial 8 with value: 0.008128024749047167.
```

```
[I 2024-08-30 19:37:09,946] Trial 9 finished with value: 0.009715677261884544
and parameters: {'learning_rate': 0.2786125633959664, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.3533429986080769, 'subsample':
0.881789821751884}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:10,331] Trial 10 finished with value: 0.00997788418881851
and parameters: {'learning_rate': 0.28478258921633615, 'max_depth': 9,
'n_estimators': 480, 'reg_lambda': 0.3953936532802745, 'subsample':
0.8801551825522665}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:10,742] Trial 11 finished with value: 0.011075794830665281
and parameters: {'learning_rate': 0.2821151880959645, 'max_depth': 8,
'n_estimators': 450, 'reg_lambda': 0.3908041839336464, 'subsample':
0.8810161952897017}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:11,130] Trial 12 finished with value: 0.010787646247290048
and parameters: {'learning_rate': 0.2830954380811893, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.3833684128486907, 'subsample':
0.8859899337401026}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:11,544] Trial 13 finished with value: 0.010342822991927323
and parameters: {'learning_rate': 0.27818814479540077, 'max_depth': 7,
'n_estimators': 453, 'reg_lambda': 0.3978550714955931, 'subsample':
0.8820513957011283}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:11,943] Trial 14 finished with value: 0.009174190844717435
and parameters: {'learning_rate': 0.28994127215913323, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.35921125670080906, 'subsample':
0.8802671559058357}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:12,329] Trial 15 finished with value: 0.009761292602609842
and parameters: {'learning_rate': 0.2898972075405907, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.3612301359744308, 'subsample':
0.880075960726512}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:12,721] Trial 16 finished with value: 0.009671303242556644
and parameters: {'learning_rate': 0.29685936888423176, 'max_depth': 9,
'n_estimators': 509, 'reg_lambda': 0.37005250438089937, 'subsample':
0.8807553801968903}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:13,122] Trial 17 finished with value: 0.009960888991857889
and parameters: {'learning_rate': 0.2886857463722306, 'max_depth': 7,
'n_estimators': 485, 'reg_lambda': 0.378188326097952, 'subsample':
0.8806741676821868}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:13,514] Trial 18 finished with value: 0.009726633919485628
and parameters: {'learning_rate': 0.26445638508986874, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.39046193786109756, 'subsample':
0.8825786096801025}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:13,906] Trial 19 finished with value: 0.009881691348860027
and parameters: {'learning_rate': 0.29357633008532474, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.3586821317836754, 'subsample':
0.8813801140221891}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:14,366] Trial 20 finished with value: 0.009284459727844469
and parameters: {'learning_rate': 0.2848596408775227, 'max_depth': 9,
'n_estimators': 509, 'reg_lambda': 0.3683651615347092, 'subsample':
0.880571638613096}. Best is trial 8 with value: 0.008128024749047167.
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[I 2024-08-30 19:37:15,726] Trial 21 finished with value: 0.009875276649798443
and parameters: {'learning_rate': 0.28593590559532034, 'max_depth': 9,
'n_estimators': 506, 'reg_lambda': 0.3663429300124235, 'subsample':
0.8805879197658341}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:17,547] Trial 22 finished with value: 0.00866388783814881
and parameters: {'learning_rate': 0.27751990054490644, 'max_depth': 9,
'n_estimators': 511, 'reg_lambda': 0.37116260218115127, 'subsample':
0.8812456896941212}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:19,231] Trial 23 finished with value: 0.009444508161355735
and parameters: {'learning_rate': 0.27764624068953364, 'max_depth': 9,
'n_estimators': 517, 'reg_lambda': 0.3749318477292058, 'subsample':
0.8812772416087329}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:19,621] Trial 24 finished with value: 0.008636886224360122
and parameters: {'learning_rate': 0.27581921111898017, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.381696737648483, 'subsample':
0.8820698532701083}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:20,089] Trial 25 finished with value: 0.010721615957522098
and parameters: {'learning_rate': 0.272102054306523, 'max_depth': 9,
'n_estimators': 497, 'reg_lambda': 0.38200488582370656, 'subsample':
0.8821880256898889}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:20,472] Trial 26 finished with value: 0.00855346950562151
and parameters: {'learning_rate': 0.2744740408149602, 'max_depth': 9,
'n_estimators': 529, 'reg_lambda': 0.3867896787526843, 'subsample':
0.8826262242679077}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:20,881] Trial 27 finished with value: 0.010980755963299275
and parameters: {'learning_rate': 0.2654434824903746, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.3874485216061999, 'subsample':
0.8826935527540276}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:21,316] Trial 28 finished with value: 0.010127127671186177
and parameters: {'learning_rate': 0.2735558491176668, 'max_depth': 9,
'n_estimators': 528, 'reg_lambda': 0.39314698954247995, 'subsample':
0.883678570287231}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:21,702] Trial 29 finished with value: 0.010326113251997643
and parameters: {'learning_rate': 0.2804908201432842, 'max_depth': 9,
'n_estimators': 463, 'reg_lambda': 0.385702818671398, 'subsample':
0.8824595958412371}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:22,126] Trial 30 finished with value: 0.009213369032387975
and parameters: {'learning_rate': 0.2689729468145289, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.3991474640574046, 'subsample':
0.8815903217474211}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:22,512] Trial 31 finished with value: 0.010408156887206418
and parameters: {'learning_rate': 0.27458682440986354, 'max_depth': 9,
'n_estimators': 530, 'reg_lambda': 0.3782830042869008, 'subsample':
0.8822981053899788}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:22,884] Trial 32 finished with value: 0.010012325440971253
and parameters: {'learning_rate': 0.2767241192495481, 'max_depth': 9,
'n_estimators': 515, 'reg_lambda': 0.3725279993806802, 'subsample':
0.8829934410467661}. Best is trial 8 with value: 0.008128024749047167.

[I 2024-08-30 19:37:23,276] Trial 33 finished with value: 0.009754491386365334 and parameters: {'learning_rate': 0.2753395371938518, 'max_depth': 9, 'n_estimators': 497, 'reg_lambda': 0.38314323476212764, 'subsample': 0.8813089623630599}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:23,650] Trial 34 finished with value: 0.010799585934055 and parameters: {'learning_rate': 0.28109229204738867, 'max_depth': 9, 'n_estimators': 513, 'reg_lambda': 0.3904657436268435, 'subsample': 0.8818171629726991}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:24,029] Trial 35 finished with value: 0.010142357152010948 and parameters: {'learning_rate': 0.26514610681049183, 'max_depth': 9, 'n_estimators': 503, 'reg_lambda': 0.3764144236010353, 'subsample': 0.8830057269658671}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:24,447] Trial 36 finished with value: 0.009137903294109004 and parameters: {'learning_rate': 0.2613331851426383, 'max_depth': 9, 'n_estimators': 522, 'reg_lambda': 0.37243852803639677, 'subsample': 0.8844720135356824}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:24,863] Trial 37 finished with value: 0.009613733780720932 and parameters: {'learning_rate': 0.25337984494721705, 'max_depth': 7, 'n_estimators': 486, 'reg_lambda': 0.3872818259089143, 'subsample': 0.8815980577565663}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:25,295] Trial 38 finished with value: 0.009841800820570264 and parameters: {'learning_rate': 0.2500598211400881, 'max_depth': 8, 'n_estimators': 521, 'reg_lambda': 0.37985730562319536, 'subsample': 0.8811210527490677}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:25,682] Trial 39 finished with value: 0.009250031853060895 and parameters: {'learning_rate': 0.27112652169607293, 'max_depth': 8, 'n_estimators': 495, 'reg_lambda': 0.38474861768243007, 'subsample': 0.882065813514185}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:26,060] Trial 40 finished with value: 0.010134954761599995 and parameters: {'learning_rate': 0.2796264281053557, 'max_depth': 9, 'n_estimators': 501, 'reg_lambda': 0.3816097923675005, 'subsample': 0.883485855339456}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:26,483] Trial 41 finished with value: 0.009238460785218174 and parameters: {'learning_rate': 0.261778765107789, 'max_depth': 9, 'n_estimators': 522, 'reg_lambda': 0.3723084383310345, 'subsample': 0.8844595263905306}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:26,872] Trial 42 finished with value: 0.01016963643076631 and parameters: {'learning_rate': 0.2594563829029264, 'max_depth': 9, 'n_estimators': 526, 'reg_lambda': 0.3644792539124414, 'subsample': 0.885500502323454}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:27,290] Trial 43 finished with value: 0.010010410279489665 and parameters: {'learning_rate': 0.2672288951905679, 'max_depth': 9, 'n_estimators': 520, 'reg_lambda': 0.3693394242818906, 'subsample': 0.8848678259868793}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:27,675] Trial 44 finished with value: 0.009822718586100274 and parameters: {'learning_rate': 0.2830602260644107, 'max_depth': 9, 'n_estimators': 512, 'reg_lambda': 0.3739678246675816, 'subsample': 0.8829631258664897}. Best is trial 8 with value: 0.008128024749047167.

[I 2024-08-30 19:37:28,069] Trial 45 finished with value: 0.009745225567131753
and parameters: {'learning_rate': 0.25624473933065456, 'max_depth': 9,
'n_estimators': 474, 'reg_lambda': 0.3945421883484903, 'subsample':
0.8845971865699817}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:28,483] Trial 46 finished with value: 0.010145972775411823
and parameters: {'learning_rate': 0.2879768492838258, 'max_depth': 9,
'n_estimators': 517, 'reg_lambda': 0.3765764267508744, 'subsample':
0.8816520090975989}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:28,858] Trial 47 finished with value: 0.009901592248108472
and parameters: {'learning_rate': 0.2761944727717091, 'max_depth': 9,
'n_estimators': 530, 'reg_lambda': 0.38867368969328253, 'subsample':
0.8838491793902697}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:30,475] Trial 48 finished with value: 0.00950775055060663
and parameters: {'learning_rate': 0.27350652685117155, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.38074113642603186, 'subsample':
0.8843268741069522}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:32,110] Trial 49 finished with value: 0.009732101549978247
and parameters: {'learning_rate': 0.2695176237877569, 'max_depth': 9,
'n_estimators': 511, 'reg_lambda': 0.3671337915445089, 'subsample':
0.8809455690343729}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:33,995] Trial 50 finished with value: 0.008739532021102746
and parameters: {'learning_rate': 0.28644222382263695, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3929204745932078, 'subsample':
0.8832262705025848}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:34,383] Trial 51 finished with value: 0.00902105274569655
and parameters: {'learning_rate': 0.286780665323562, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3926867139785583, 'subsample':
0.8850155511132693}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:34,792] Trial 52 finished with value: 0.009100033699805459
and parameters: {'learning_rate': 0.29319484066355406, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3928624701479323, 'subsample':
0.8850724316608907}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:35,168] Trial 53 finished with value: 0.010272172626827036
and parameters: {'learning_rate': 0.2864025233873873, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.3965571022040373, 'subsample':
0.8859990478586557}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:35,542] Trial 54 finished with value: 0.010968700962072175
and parameters: {'learning_rate': 0.29161046186481915, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3887106344425008, 'subsample':
0.8823713671684845}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:35,949] Trial 55 finished with value: 0.010075561264705166
and parameters: {'learning_rate': 0.2834284609154353, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.39226652917332605, 'subsample':
0.8819775654701998}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:36,371] Trial 56 finished with value: 0.01047861250263692
and parameters: {'learning_rate': 0.27842690154079325, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.39573672818675876, 'subsample':
0.8827406416832683}. Best is trial 8 with value: 0.008128024749047167.

[I 2024-08-30 19:37:36,781] Trial 57 finished with value: 0.009250911000616549
and parameters: {'learning_rate': 0.2872182981529088, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.38456968862681096, 'subsample':
0.8833130422672619}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:37,153] Trial 58 finished with value: 0.009146563847721566
and parameters: {'learning_rate': 0.2997366532851868, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.38890017401024857, 'subsample':
0.8852639128769255}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:37,558] Trial 59 finished with value: 0.011002146627006167
and parameters: {'learning_rate': 0.28431248054267017, 'max_depth': 7,
'n_estimators': 466, 'reg_lambda': 0.39785779936122767, 'subsample':
0.8856631900560263}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:37,977] Trial 60 finished with value: 0.010519213947799307
and parameters: {'learning_rate': 0.2817916645441617, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.3918116570199817, 'subsample':
0.8821308618082182}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:38,344] Trial 61 finished with value: 0.009866155656472517
and parameters: {'learning_rate': 0.2948703506225686, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.39370608389206624, 'subsample':
0.8852336229371771}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:38,720] Trial 62 finished with value: 0.009334584960518729
and parameters: {'learning_rate': 0.2909757515915827, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.39021094485391256, 'subsample':
0.8849722328671015}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:39,110] Trial 63 finished with value: 0.010903035424256335
and parameters: {'learning_rate': 0.2896284940970399, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38659204322153107, 'subsample':
0.881419061592441}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:39,490] Trial 64 finished with value: 0.010107973391680323
and parameters: {'learning_rate': 0.2937070269444558, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.39230014624616977, 'subsample':
0.8841452241612804}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:39,876] Trial 65 finished with value: 0.011313529422992354
and parameters: {'learning_rate': 0.2963189286084354, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3998738914664413, 'subsample':
0.8818402204855122}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:40,274] Trial 66 finished with value: 0.010238069559037383
and parameters: {'learning_rate': 0.27955367102281564, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.396847151675636, 'subsample':
0.8803964596088383}. Best is trial 8 with value: 0.008128024749047167.
[I 2024-08-30 19:37:40,666] Trial 67 finished with value: 0.008034845795691038
and parameters: {'learning_rate': 0.27720598099509935, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.3838433458916254, 'subsample':
0.8828213575149828}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:41,106] Trial 68 finished with value: 0.009030062097447151
and parameters: {'learning_rate': 0.2734963700051498, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.38431281557215247, 'subsample':
0.8828504364770358}. Best is trial 67 with value: 0.008034845795691038.

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[I 2024-08-30 19:37:41,490] Trial 69 finished with value: 0.008615899961246619
and parameters: {'learning_rate': 0.28524167707487336, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.3783416901195605, 'subsample':
0.8825775381650098}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:41,931] Trial 70 finished with value: 0.010988326482837606
and parameters: {'learning_rate': 0.2770610446545207, 'max_depth': 7,
'n_estimators': 478, 'reg_lambda': 0.37823687058811545, 'subsample':
0.8831196027278077}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:42,312] Trial 71 finished with value: 0.009616343638096197
and parameters: {'learning_rate': 0.2855142810662196, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.38238645655135156, 'subsample':
0.8825087063770225}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:42,705] Trial 72 finished with value: 0.010336282815084214
and parameters: {'learning_rate': 0.28055293383417546, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.386063690112772, 'subsample':
0.8823045691344162}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:43,123] Trial 73 finished with value: 0.010427518147468666
and parameters: {'learning_rate': 0.2752567891342792, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.3767995488356426, 'subsample':
0.8835043631724369}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:43,540] Trial 74 finished with value: 0.010043030668198805
and parameters: {'learning_rate': 0.2828703481147847, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.37952789355135497, 'subsample':
0.882707475651561 4}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:44,042] Trial 75 finished with value: 0.010205838887024482
and parameters: {'learning_rate': 0.27191764905828625, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.3837847294742518, 'subsample':
0.8822691482150682}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:45,524] Trial 76 finished with value: 0.010841199492631409
and parameters: {'learning_rate': 0.2793258203079642, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.3896018929218932, 'subsample':
0.8825233408057902}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:47,139] Trial 77 finished with value: 0.008367052890789938
and parameters: {'learning_rate': 0.28445791105147733, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3871041754494626, 'subsample':
0.883167275160095}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:49,344] Trial 78 finished with value: 0.008773421995888186
and parameters: {'learning_rate': 0.28397729912298236, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.385484355305123, 'subsample':
0.8832326736666178}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:49,731] Trial 79 finished with value: 0.009719799450270067
and parameters: {'learning_rate': 0.28191345536258455, 'max_depth': 8,
'n_estimators': 500, 'reg_lambda': 0.3876691632628617, 'subsample':
0.8830940537933974}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:50,111] Trial 80 finished with value: 0.010770446612832201
and parameters: {'learning_rate': 0.2779426924156148, 'max_depth': 9,
'n_estimators': 508, 'reg_lambda': 0.38121346933212724, 'subsample':
0.8828325855894543}. Best is trial 67 with value: 0.008034845795691038.
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[I 2024-08-30 19:37:50,587] Trial 81 finished with value: 0.009066560200145193
and parameters: {'learning_rate': 0.2843936370989118, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3858282393679996, 'subsample':
0.88324028434093}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:50,973] Trial 82 finished with value: 0.00853635218032967
and parameters: {'learning_rate': 0.28860882092292006, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.3829683222712166, 'subsample':
0.883480642445765}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:51,397] Trial 83 finished with value: 0.009453834104341639
and parameters: {'learning_rate': 0.2885230174894273, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.3829138914245768, 'subsample':
0.8835222992802972}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:51,818] Trial 84 finished with value: 0.009804391741276014
and parameters: {'learning_rate': 0.27436185449679157, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.3798616801802812, 'subsample':
0.8837828223081701}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:52,215] Trial 85 finished with value: 0.009295720803311402
and parameters: {'learning_rate': 0.2854522503384001, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.38719281476193157, 'subsample':
0.883411761415612}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:52,619] Trial 86 finished with value: 0.010245761631548151
and parameters: {'learning_rate': 0.28981391479964175, 'max_depth': 9,
'n_estimators': 488, 'reg_lambda': 0.374076477141746, 'subsample':
0.8819815566670206}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:53,018] Trial 87 finished with value: 0.01010161397974506
and parameters: {'learning_rate': 0.275707278638503, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.38251010584687006, 'subsample':
0.8836098334953951}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:53,417] Trial 88 finished with value: 0.009146163760472652
and parameters: {'learning_rate': 0.28102281742085783, 'max_depth': 9,
'n_estimators': 506, 'reg_lambda': 0.37065963974683286, 'subsample':
0.882881721671549}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:53,800] Trial 89 finished with value: 0.008919611094365665
and parameters: {'learning_rate': 0.2770784821111513, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.3503137791042793, 'subsample':
0.8826161175296372}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:54,174] Trial 90 finished with value: 0.010554106392329565
and parameters: {'learning_rate': 0.28793991799109914, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.3908865201174775, 'subsample':
0.8816480575784003}. Best is trial 67 with value: 0.008034845795691038.
[I 2024-08-30 19:37:54,582] Trial 91 finished with value: 0.008026121693142462
and parameters: {'learning_rate': 0.28328007173466174, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.38442500000958735, 'subsample':
0.8830707069740609}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:54,967] Trial 92 finished with value: 0.010545014367498958
and parameters: {'learning_rate': 0.2822080301562128, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.38795763434897057, 'subsample':
0.8823845278213625}. Best is trial 91 with value: 0.008026121693142462.
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[I 2024-08-30 19:37:55,358] Trial 93 finished with value: 0.009091578764887476
and parameters: {'learning_rate': 0.28675118989149123, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3835867307018996, 'subsample':
0.8831051108697067}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:55,777] Trial 94 finished with value: 0.010023186041678924
and parameters: {'learning_rate': 0.2708734236585104, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.37553512779363774, 'subsample':
0.8810920758203321}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:56,170] Trial 95 finished with value: 0.008864066874341481
and parameters: {'learning_rate': 0.2727704736115519, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.3805928213995203, 'subsample':
0.8829589525180029}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:56,580] Trial 96 finished with value: 0.00920593140768747
and parameters: {'learning_rate': 0.2797010051539254, 'max_depth': 9,
'n_estimators': 493, 'reg_lambda': 0.38500806630382717, 'subsample':
0.8808626720004229}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:56,965] Trial 97 finished with value: 0.009273341442510267
and parameters: {'learning_rate': 0.28498519356023483, 'max_depth': 8,
'n_estimators': 504, 'reg_lambda': 0.3818757552315215, 'subsample':
0.8833240723858433}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:57,352] Trial 98 finished with value: 0.010963374200037233
and parameters: {'learning_rate': 0.29097622098431647, 'max_depth': 8,
'n_estimators': 499, 'reg_lambda': 0.391095786485076, 'subsample':
0.8821968216102842}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:57,749] Trial 99 finished with value: 0.009271583418672055
and parameters: {'learning_rate': 0.27843669071787147, 'max_depth': 9,
'n_estimators': 514, 'reg_lambda': 0.3893823113233106, 'subsample':
0.8826594012186867}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:58,128] Trial 100 finished with value: 0.009858247347009977
and parameters: {'learning_rate': 0.2832158454509029, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.3865410967314679, 'subsample':
0.8839674945358527}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:58,504] Trial 101 finished with value: 0.008733564466175894
and parameters: {'learning_rate': 0.28446532741034314, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.38561924738916525, 'subsample':
0.8832458619657305}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:37:59,849] Trial 102 finished with value: 0.008802063789976661
and parameters: {'learning_rate': 0.2878383442082696, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.37892046130235224, 'subsample':
0.8837965070834071}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:01,606] Trial 103 finished with value: 0.010179175416599755
and parameters: {'learning_rate': 0.2892491791555805, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.38416007355562604, 'subsample':
0.881451584902067}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:03,225] Trial 104 finished with value: 0.009200195288450303
and parameters: {'learning_rate': 0.28577520319886834, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38807287994316236, 'subsample':
0.8831015201290754}. Best is trial 91 with value: 0.008026121693142462.

[I 2024-08-30 19:38:03,658] Trial 105 finished with value: 0.008686953237331934
and parameters: {'learning_rate': 0.28220964883524213, 'max_depth': 8,
'n_estimators': 519, 'reg_lambda': 0.38529057411973544, 'subsample':
0.882766309100826}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:04,112] Trial 106 finished with value: 0.008158431222614925
and parameters: {'learning_rate': 0.281621072585684, 'max_depth': 8,
'n_estimators': 519, 'reg_lambda': 0.37734554825690947, 'subsample':
0.88288990217018}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:04,520] Trial 107 finished with value: 0.008655661418171147
and parameters: {'learning_rate': 0.2803894161169384, 'max_depth': 8,
'n_estimators': 518, 'reg_lambda': 0.3781584940755726, 'subsample':
0.882770356419073}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:04,956] Trial 108 finished with value: 0.010701172042299537
and parameters: {'learning_rate': 0.27618302703007885, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.37339549204871086, 'subsample':
0.8825674281188204}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:05,371] Trial 109 finished with value: 0.009399259136358773
and parameters: {'learning_rate': 0.28058867768051804, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.3774605339767153, 'subsample':
0.8817591357081223}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:05,765] Trial 110 finished with value: 0.009557449769967167
and parameters: {'learning_rate': 0.2772968628622906, 'max_depth': 9,
'n_estimators': 516, 'reg_lambda': 0.3802408880198649, 'subsample':
0.8824343253949085}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:06,211] Trial 111 finished with value: 0.008568155774676388
and parameters: {'learning_rate': 0.2814524212010639, 'max_depth': 8,
'n_estimators': 520, 'reg_lambda': 0.3775962135955822, 'subsample':
0.8828694465419596}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:06,632] Trial 112 finished with value: 0.008659715722040717
and parameters: {'learning_rate': 0.2787841893329535, 'max_depth': 8,
'n_estimators': 521, 'reg_lambda': 0.3771749786934753, 'subsample':
0.8828894886306164}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:07,094] Trial 113 finished with value: 0.009374221137220 39
and parameters: {'learning_rate': 0.27908134568427073, 'max_depth': 8,
'n_estimators': 522, 'reg_lambda': 0.3776307159368126, 'subsample':
0.8829674947924828}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:07,565] Trial 114 finished with value: 0.008343125397430777
and parameters: {'learning_rate': 0.28131711297816187, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.3764144495834652, 'subsample':
0.8828142254543694}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:07,994] Trial 115 finished with value: 0.008347197445486976
and parameters: {'learning_rate': 0.28139595183637345, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.37523180525310773, 'subsample':
0.8827668840607185}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:08,409] Trial 116 finished with value: 0.009336612301847014
and parameters: {'learning_rate': 0.2814965461754603, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.3746721112845223, 'subsample':
0.8830379932214872}. Best is trial 91 with value: 0.008026121693142462.

[I 2024-08-30 19:38:08,795] Trial 117 finished with value: 0.009124920970859042
and parameters: {'learning_rate': 0.2835045857111429, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.375938860185198, 'subsample':
0.8826704410015173}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:09,216] Trial 118 finished with value: 0.009759024037343366
and parameters: {'learning_rate': 0.2828833022392032, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.3815597027568026, 'subsample':
0.8834235741321912}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:09,612] Trial 119 finished with value: 0.01035040198852337
and parameters: {'learning_rate': 0.28218263386498343, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.37950887213942075, 'subsample':
0.8824572884134689}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:10,038] Trial 120 finished with value: 0.009788850857294121
and parameters: {'learning_rate': 0.27492583110165203, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.3786651261687912, 'subsample':
0.8821140573630434}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:10,434] Trial 121 finished with value: 0.008596804588477258
and parameters: {'learning_rate': 0.2802244460218956, 'max_depth': 8,
'n_estimators': 518, 'reg_lambda': 0.3749478305608486, 'subsample':
0.8827309404742588}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:10,833] Trial 122 finished with value: 0.008771436002380213
and parameters: {'learning_rate': 0.28048130004661187, 'max_depth': 8,
'n_estimators': 522, 'reg_lambda': 0.3726815564858564, 'subsample':
0.8828269495700873}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:11,264] Trial 123 finished with value: 0.009698245691979577
and parameters: {'learning_rate': 0.2798533930250023, 'max_depth': 8,
'n_estimators': 520, 'reg_lambda': 0.37566301018946135, 'subsample':
0.8831500923340374}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:11,662] Trial 124 finished with value: 0.009533502218293152
and parameters: {'learning_rate': 0.2814559174756833, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.3749827397596167, 'subsample':
0.8822666158733568}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:12,088] Trial 125 finished with value: 0.00879384385455254
and parameters: {'learning_rate': 0.2782533820756209, 'max_depth': 8,
'n_estimators': 519, 'reg_lambda': 0.38313408501347535, 'subsample':
0.882608882698594}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:12,490] Trial 126 finished with value: 0.008295694473078121
and parameters: {'learning_rate': 0.27418436542972885, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.3765474950604658, 'subsample':
0.8829133567391179}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:12,899] Trial 127 finished with value: 0.008916915065136055
and parameters: {'learning_rate': 0.28377674635081135, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.37357488332049016, 'subsample':
0.882948700051803}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:13,392] Trial 128 finished with value: 0.00928145790817158
and parameters: {'learning_rate': 0.2853490626124158, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.37179307931889966, 'subsample':
0.8836530208041831}. Best is trial 91 with value: 0.008026121693142462.

[I 2024-08-30 19:38:14,838] Trial 129 finished with value: 0.00861476625481833
and parameters: {'learning_rate': 0.27634711630961584, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.37648281205921785, 'subsample':
0.88331681964221}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:17,738] Trial 130 finished with value: 0.009508059250054879
and parameters: {'learning_rate': 0.27615861672626013, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.37601004183543246, 'subsample':
0.8833662114977937}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:18,164] Trial 131 finished with value: 0.008258279231747366
and parameters: {'learning_rate': 0.282655772359075, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.3768728712643426, 'subsample':
0.883017405496507}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:18,627] Trial 132 finished with value: 0.009504459830327678
and parameters: {'learning_rate': 0.2745788738364511, 'max_depth': 8,
'n_estimators': 517, 'reg_lambda': 0.37685878438650333, 'subsample':
0.8831989811968209}. Best is trial 91 with value: 0.008026121693142462.
[I 2024-08-30 19:38:19,067] Trial 133 finished with value: 0.007651281092622342
and parameters: {'learning_rate': 0.27303969155875646, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.37465280697225456, 'subsample':
0.8829987910196052}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:20,185] Trial 134 finished with value: 0.008284060129099375
and parameters: {'learning_rate': 0.2731803627617561, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.3746989028132769, 'subsample':
0.8827736745024172}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:20,684] Trial 135 finished with value: 0.008755398847193835
and parameters: {'learning_rate': 0.2673697903114529, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.36993512864654693, 'subsample':
0.8828888415404486}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:21,116] Trial 136 finished with value: 0.011023793205515215
and parameters: {'learning_rate': 0.26944231456549994, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.37395048789421154, 'subsample':
0.8830317149427803}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:21,554] Trial 137 finished with value: 0.01068701859091364
and parameters: {'learning_rate': 0.27247846573251266, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.37108160960585346, 'subsample':
0.8830457644478188}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:21,985] Trial 138 finished with value: 0.009711460745606167
and parameters: {'learning_rate': 0.2737183620556639, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3727515866339465, 'subsample':
0.8835146072537651}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:22,412] Trial 139 finished with value: 0.009313937928564265
and parameters: {'learning_rate': 0.27058588056656835, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.37542859009787327, 'subsample':
0.8831737219048854}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:22,840] Trial 140 finished with value: 0.008450656853913883
and parameters: {'learning_rate': 0.27157086978142575, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.3684649427460437, 'subsample':
0.8827990638190469}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:23,247] Trial 141 finished with value: 0.00931300066790661
and parameters: {'learning_rate': 0.26865158114989224, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.3684410438830572, 'subsample':
0.8827859424252462}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:23,679] Trial 142 finished with value: 0.009438920471499803
and parameters: {'learning_rate': 0.2714112141386333, 'max_depth': 8,
'n_estimators': 522, 'reg_lambda': 0.3657312483469203, 'subsample':
0.8829236717490538}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:24,087] Trial 143 finished with value: 0.009610102463429424
and parameters: {'learning_rate': 0.27297826088911153, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.36334132797306107, 'subsample':
0.8827257289926158}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:24,500] Trial 144 finished with value: 0.009448727952914737
and parameters: {'learning_rate': 0.2719310847497121, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3605962586251208, 'subsample':
0.8825229721344721}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:24,927] Trial 145 finished with value: 0.009374839771735682
and parameters: {'learning_rate': 0.27363712255187717, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.3864831056640343, 'subsample':
0.882832873467626}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:25,366] Trial 146 finished with value: 0.009588416559480254
and parameters: {'learning_rate': 0.2702214364796633, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3573600364132198, 'subsample':
0.8830266046115121}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:25,796] Trial 147 finished with value: 0.008845824497113772
and parameters: {'learning_rate': 0.2832202639776951, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.37913654904022687, 'subsample':
0.8832677679829237}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:26,204] Trial 148 finished with value: 0.009560114827980911
and parameters: {'learning_rate': 0.27450670740103467, 'max_depth': 8,
'n_estimators': 520, 'reg_lambda': 0.37414025616093205, 'subsample':
0.8826733519329072}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:26,605] Trial 149 finished with value: 0.008450242646439092
and parameters: {'learning_rate': 0.28216490116189963, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.38066685661539623, 'subsample':
0.8831006558740525}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:27,027] Trial 150 finished with value: 0.009579697969374357
and parameters: {'learning_rate': 0.28445647021731507, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.3803491557856951, 'subsample':
0.8831095870912857}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:27,442] Trial 151 finished with value: 0.008863928090236523
and parameters: {'learning_rate': 0.2813864379839212, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.3774540957969422, 'subsample':
0.8829356924741312}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:28,173] Trial 152 finished with value: 0.00996359124471377
and parameters: {'learning_rate': 0.28272564941163086, 'max_depth': 7,
'n_estimators': 528, 'reg_lambda': 0.3810412729192649, 'subsample':
0.8834290115541504}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:30,370] Trial 153 finished with value: 0.00977663001995283
and parameters: {'learning_rate': 0.2776342384711744, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3777323587158815, 'subsample':
0.8828550501536849}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:32,524] Trial 154 finished with value: 0.009657822929541853
and parameters: {'learning_rate': 0.2822442472401649, 'max_depth': 7,
'n_estimators': 525, 'reg_lambda': 0.3825175938724885, 'subsample':
0.8831268174854378}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:32,916] Trial 155 finished with value: 0.009163425241672482
and parameters: {'learning_rate': 0.28147173877960474, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.38451669313163, 'subsample':
0.8826498971939717}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:33,354] Trial 156 finished with value: 0.009668258099564562
and parameters: {'learning_rate': 0.2863640129509118, 'max_depth': 8,
'n_estimators': 521, 'reg_lambda': 0.37679494062877084, 'subsample':
0.8823905662416299}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:33,792] Trial 157 finished with value: 0.00930496850695525
and parameters: {'learning_rate': 0.2790598929751782, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3788370868649406, 'subsample':
0.883019038712503}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:34,239] Trial 158 finished with value: 0.008641236084333101
and parameters: {'learning_rate': 0.2838804607835264, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.3872290506151989, 'subsample':
0.8833123857705268}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:34,659] Trial 159 finished with value: 0.009432577809388306
and parameters: {'learning_rate': 0.2725840200877293, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.38384754609493854, 'subsample':
0.8835796709294366}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:35,106] Trial 160 finished with value: 0.008143157457439015
and parameters: {'learning_rate': 0.2752448149876644, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3887851746781476, 'subsample':
0.8827826007129015}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:35,519] Trial 161 finished with value: 0.00808880901613949
and parameters: {'learning_rate': 0.2757057010356032, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.38970205012351095, 'subsample':
0.8828575403923108}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:35,945] Trial 162 finished with value: 0.008469113138870367
and parameters: {'learning_rate': 0.27575569048101267, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.3897937027972765, 'subsample':
0.8827674190249943}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:36,375] Trial 163 finished with value: 0.00843915142076598
and parameters: {'learning_rate': 0.27563816663187823, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.3900180498133997, 'subsample':
0.8827439723701107}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:36,783] Trial 164 finished with value: 0.00965196628490644
and parameters: {'learning_rate': 0.27416044298288966, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3899601340008786, 'subsample':
0.8825599475897052}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:37,222] Trial 165 finished with value: 0.008368480133022603
and parameters: {'learning_rate': 0.2751245101506408, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.3884749743374048, 'subsample':
0.882870102864634}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:37,621] Trial 166 finished with value: 0.008946272777136883
and parameters: {'learning_rate': 0.27534097054059375, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.39166494305065996, 'subsample':
0.8829453849106259}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:38,055] Trial 167 finished with value: 0.009067350481282738
and parameters: {'learning_rate': 0.2733572865915537, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.38875002994259433, 'subsample':
0.8827507961320401}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:38,480] Trial 168 finished with value: 0.00942924269952677
and parameters: {'learning_rate': 0.2775836872301148, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.38830836336384844, 'subsample':
0.8831771411791555}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:38,888] Trial 169 finished with value: 0.009422659840374405
and parameters: {'learning_rate': 0.2764215084239127, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.39135100620960633, 'subsample':
0.8825152758542207}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:39,319] Trial 170 finished with value: 0.010718768009762111
and parameters: {'learning_rate': 0.2717623084399741, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3876586320670147, 'subsample':
0.8830123618656665}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:39,720] Trial 171 finished with value: 0.008404476489019654
and parameters: {'learning_rate': 0.2757037861984025, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.3897468689719967, 'subsample':
0.882809559566582}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:40,133] Trial 172 finished with value: 0.008801973105068838
and parameters: {'learning_rate': 0.2755371327402172, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.38911496864001954, 'subsample':
0.8827643033418563}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:40,562] Trial 173 finished with value: 0.007935002659371096
and parameters: {'learning_rate': 0.2747234128541731, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.3906997041163594, 'subsample':
0.8828810469952579}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:40,977] Trial 174 finished with value: 0.009823717045397803
and parameters: {'learning_rate': 0.2765427859155411, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.39063900337036866, 'subsample':
0.8826206629063442}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:41,430] Trial 175 finished with value: 0.008446020899924854
and parameters: {'learning_rate': 0.2750260622198315, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.3896871069673265, 'subsample':
0.8829266961367894}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:41,836] Trial 176 finished with value: 0.008740931106658656
and parameters: {'learning_rate': 0.27477437848916664, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.39011478220686713, 'subsample':
0.8828980622914416}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:42,247] Trial 177 finished with value: 0.00868623054438866
and parameters: {'learning_rate': 0.27371103785765455, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3948689829016913, 'subsample':
0.8828830992334058}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:42,985] Trial 178 finished with value: 0.008770051328935298
and parameters: {'learning_rate': 0.27491111192457984, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.39247048582863614, 'subsample':
0.8829995475271696}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:44,449] Trial 179 finished with value: 0.009339663193691753
and parameters: {'learning_rate': 0.27702246556483573, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.3887153037568381, 'subsample':
0.8826707669281976}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:47,154] Trial 180 finished with value: 0.010033887667050762
and parameters: {'learning_rate': 0.2755183777260589, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3934700332567052, 'subsample':
0.882397160333508}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:47,726] Trial 181 finished with value: 0.009417370736148156
and parameters: {'learning_rate': 0.27283560369899246, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.3908768802560872, 'subsample':
0.8830945015046053}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:48,151] Trial 182 finished with value: 0.00988457541240207
and parameters: {'learning_rate': 0.27403018997018097, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.3895259772854318, 'subsample':
0.8832155143204468}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:48,591] Trial 183 finished with value: 0.00887725335775565
and parameters: {'learning_rate': 0.27712194106811083, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.38717201433425236, 'subsample':
0.8829565943818328}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:49,035] Trial 184 finished with value: 0.009884316671740487
and parameters: {'learning_rate': 0.27852126713756514, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.3883531760177587, 'subsample':
0.8830748777313134}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:49,465] Trial 185 finished with value: 0.00886197847135227
and parameters: {'learning_rate': 0.2749794930890474, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3917066158027775, 'subsample':
0.8828138616334663}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:49,910] Trial 186 finished with value: 0.009422396821916718
and parameters: {'learning_rate': 0.2729507012864897, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.37495518534196437, 'subsample':
0.882669692386715}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:50,344] Trial 187 finished with value: 0.008629616370399065
and parameters: {'learning_rate': 0.28001875169509605, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.3903064311154552, 'subsample':
0.8831622668797419}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:50,819] Trial 188 finished with value: 0.008252919943716585
and parameters: {'learning_rate': 0.2742192815679344, 'max_depth': 8,
'n_estimators': 522, 'reg_lambda': 0.3863070944218255, 'subsample':
0.8828602527327548}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:51,259] Trial 189 finished with value: 0.008222761742515971 and parameters: {'learning_rate': 0.274129854196703, 'max_depth': 8, 'n_estimators': 522, 'reg_lambda': 0.3867111299195585, 'subsample': 0.88285076956649}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:51,715] Trial 190 finished with value: 0.009760763946827634 and parameters: {'learning_rate': 0.27394037168916613, 'max_depth': 8, 'n_estimators': 521, 'reg_lambda': 0.38637346210823814, 'subsample': 0.8825279031081349}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:52,131] Trial 191 finished with value: 0.009244517536167968 and parameters: {'learning_rate': 0.27595936276128796, 'max_depth': 8, 'n_estimators': 523, 'reg_lambda': 0.3878845655143538, 'subsample': 0.8829202790967635}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:52,540] Trial 192 finished with value: 0.008875581692121272 and parameters: {'learning_rate': 0.2745744757306411, 'max_depth': 8, 'n_estimators': 521, 'reg_lambda': 0.3865330370486318, 'subsample': 0.8827588130299995}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:52,959] Trial 193 finished with value: 0.008448462147215969 and parameters: {'learning_rate': 0.2756495010752013, 'max_depth': 8, 'n_estimators': 525, 'reg_lambda': 0.38907602583399953, 'subsample': 0.8828484039517409}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:53,391] Trial 194 finished with value: 0.010569125124242238 and parameters: {'learning_rate': 0.27216423700009945, 'max_depth': 8, 'n_estimators': 522, 'reg_lambda': 0.38579348377794864, 'subsample': 0.8826079316266918}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:53,820] Trial 195 finished with value: 0.008501078971824727 and parameters: {'learning_rate': 0.2741600381783166, 'max_depth': 8, 'n_estimators': 524, 'reg_lambda': 0.3877087077084701, 'subsample': 0.8830003886495278}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:54,249] Trial 196 finished with value: 0.008478376508738889 and parameters: {'learning_rate': 0.2779499346275152, 'max_depth': 8, 'n_estimators': 527, 'reg_lambda': 0.3894078673792075, 'subsample': 0.8828634911528593}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:54,670] Trial 197 finished with value: 0.009328855433568328 and parameters: {'learning_rate': 0.27657930809866005, 'max_depth': 8, 'n_estimators': 526, 'reg_lambda': 0.38693843050172466, 'subsample': 0.882990301220638}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:55,129] Trial 198 finished with value: 0.010050673193258072 and parameters: {'learning_rate': 0.27352192630735367, 'max_depth': 8, 'n_estimators': 519, 'reg_lambda': 0.3848606286555193, 'subsample': 0.8827319496835201}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:55,528] Trial 199 finished with value: 0.008526429291133768 and parameters: {'learning_rate': 0.2750694713434437, 'max_depth': 8, 'n_estimators': 454, 'reg_lambda': 0.3908499598508039, 'subsample': 0.8828067691755647}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:55,965] Trial 200 finished with value: 0.009920941248595442 and parameters: {'learning_rate': 0.27238526439123445, 'max_depth': 8, 'n_estimators': 526, 'reg_lambda': 0.3733789211513175, 'subsample': 0.8826647847130975}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:38:56,376] Trial 201 finished with value: 0.008708752512687365
and parameters: {'learning_rate': 0.27570067305775414, 'max_depth': 8,
'n_estimators': 524, 'reg_lambda': 0.38910014180274305, 'subsample':
0.8828927582209413}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:56,791] Trial 202 finished with value: 0.008610583947301105
and parameters: {'learning_rate': 0.2765083483990181, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.38886530450218626, 'subsample':
0.8828373981995127}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:57,218] Trial 203 finished with value: 0.008301425855395557
and parameters: {'learning_rate': 0.2754271782171383, 'max_depth': 8,
'n_estimators': 525, 'reg_lambda': 0.38816184078044075, 'subsample':
0.8830658747095259}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:38:58,676] Trial 204 finished with value: 0.009732547176583314
and parameters: {'learning_rate': 0.2732266166010024, 'max_depth': 8,
'n_estimators': 522, 'reg_lambda': 0.38778978043891643, 'subsample':
0.883230037970298}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:00,358] Trial 205 finished with value: 0.010325605556837756
and parameters: {'learning_rate': 0.27436239069976875, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.3760331841580906, 'subsample':
0.8831058097853183}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:02,310] Trial 206 finished with value: 0.008392599840458042
and parameters: {'learning_rate': 0.2776389082855833, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.3858373071638196, 'subsample':
0.8830173519056103}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:02,712] Trial 207 finished with value: 0.009537000356714315
and parameters: {'learning_rate': 0.2778900713388097, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.3852573262298858, 'subsample':
0.8833278220460216}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:03,114] Trial 208 finished with value: 0.009217712224743208
and parameters: {'learning_rate': 0.28377025033610026, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.38807539454031786, 'subsample':
0.8830554867233131}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:03,522] Trial 209 finished with value: 0.008932187492201855
and parameters: {'learning_rate': 0.2769961904994265, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3868042092138453, 'subsample':
0.883007030464388}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:03,948] Trial 210 finished with value: 0.010453007430919118
and parameters: {'learning_rate': 0.27885097092783284, 'max_depth': 8,
'n_estimators': 523, 'reg_lambda': 0.3858268209963058, 'subsample':
0.8827037391129687}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:04,378] Trial 211 finished with value: 0.008132625536036888
and parameters: {'learning_rate': 0.2753138303492472, 'max_depth': 8,
'n_estimators': 528, 'reg_lambda': 0.37473276822251933, 'subsample':
0.8829387776659324}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:04,788] Trial 212 finished with value: 0.009375723196698611
and parameters: {'learning_rate': 0.2760415877827368, 'max_depth': 8,
'n_estimators': 526, 'reg_lambda': 0.3746932340836083, 'subsample':
0.8832040116195219}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:05,197] Trial 213 finished with value: 0.008803911528538952
and parameters: {'learning_rate': 0.28291077516898916, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.3756819556805102, 'subsample':
0.8829539089990892}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:05,619] Trial 214 finished with value: 0.009128226367723502
and parameters: {'learning_rate': 0.2742638434300586, 'max_depth': 8,
'n_estimators': 529, 'reg_lambda': 0.376509606403365, 'subsample':
0.882775058012372}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:06,050] Trial 215 finished with value: 0.009432254159621933
and parameters: {'learning_rate': 0.270999141320208, 'max_depth': 8,
'n_estimators': 527, 'reg_lambda': 0.3740764055996088, 'subsample':
0.883113759986472}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:06,522] Trial 216 finished with value: 0.008586854826424666
and parameters: {'learning_rate': 0.2771570841461795, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.37266156564607544, 'subsample':
0.882541609453962}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:06,932] Trial 217 finished with value: 0.008061826660400943
and parameters: {'learning_rate': 0.2805624345104242, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3859742967315058, 'subsample':
0.8828981751071566}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:07,361] Trial 218 finished with value: 0.008115362349323888
and parameters: {'learning_rate': 0.280774413333894, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.38472230380244604, 'subsample':
0.8829956922997397}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:07,739] Trial 219 finished with value: 0.009345804571946038
and parameters: {'learning_rate': 0.28078887215988313, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.38348176935704414, 'subsample':
0.8830215054209295}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:08,129] Trial 220 finished with value: 0.00931289188928806
and parameters: {'learning_rate': 0.2811542291974704, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.38456448736184023, 'subsample':
0.8832571163795552}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:08,543] Trial 221 finished with value: 0.008584856937053617
and parameters: {'learning_rate': 0.27965213034361436, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.3862044643079582, 'subsample':
0.8828936891263499}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:08,924] Trial 222 finished with value: 0.00794107277386055
and parameters: {'learning_rate': 0.28238399731390046, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.38510198022781233, 'subsample':
0.8829521942956602}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:09,335] Trial 223 finished with value: 0.00906838478090227
and parameters: {'learning_rate': 0.2827031457271194, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.38591259639464, 'subsample':
0.8830851079776958}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:09,732] Trial 224 finished with value: 0.008768880433266511
and parameters: {'learning_rate': 0.28198952953131495, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3847524890097888, 'subsample':
0.8830194625329507}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:10,125] Trial 225 finished with value: 0.009603019489722437
and parameters: {'learning_rate': 0.2846779573883133, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3837909925975772, 'subsample':
0.8829390544876504}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:10,538] Trial 226 finished with value: 0.009333152815292435
and parameters: {'learning_rate': 0.2809607980149018, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3853093648619034, 'subsample':
0.8831588050099267}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:10,924] Trial 227 finished with value: 0.008230429320781472
and parameters: {'learning_rate': 0.2831542377784282, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3870926791440733, 'subsample':
0.8828581780853599}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:11,346] Trial 228 finished with value: 0.00835530937303036
and parameters: {'learning_rate': 0.2833054933069821, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3869003355335251, 'subsample':
0.8828613447348811}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:11,784] Trial 229 finished with value: 0.009834322745746657
and parameters: {'learning_rate': 0.28338268958011176, 'max_depth': 7,
'n_estimators': 464, 'reg_lambda': 0.38668807346651374, 'subsample':
0.8827500566931041}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:12,528] Trial 230 finished with value: 0.009409799132208867
and parameters: {'learning_rate': 0.28480782393267884, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38712895085237825, 'subsample':
0.882633552016712}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:13,801] Trial 231 finished with value: 0.007792859275235875
and parameters: {'learning_rate': 0.2825263190501285, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38741586543381534, 'subsample':
0.8828062264423366}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:15,647] Trial 232 finished with value: 0.008571703700029762
and parameters: {'learning_rate': 0.2822700419897459, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3874018348807131, 'subsample':
0.8828528719673231}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:17,162] Trial 233 finished with value: 0.009648032175757855
and parameters: {'learning_rate': 0.2837546620841284, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.37493155706532083, 'subsample':
0.8829320133031712}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:17,552] Trial 234 finished with value: 0.008296957652917292
and parameters: {'learning_rate': 0.2829524643539938, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3851776775740034, 'subsample':
0.8827794470257853}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:17,969] Trial 235 finished with value: 0.010097072282624069
and parameters: {'learning_rate': 0.2827786188041395, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.38480055056909207, 'subsample':
0.8826693727864494}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:18,374] Trial 236 finished with value: 0.008634878202763412
and parameters: {'learning_rate': 0.28048563609841454, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.37592299591823214, 'subsample':
0.882782095409834}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:18,789] Trial 237 finished with value: 0.008505643154796256
and parameters: {'learning_rate': 0.28190342474175745, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.38597380351148286, 'subsample':
0.8828744682391518}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:19,209] Trial 238 finished with value: 0.010067148023506538
and parameters: {'learning_rate': 0.2831914725156609, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3838708020779704, 'subsample':
0.8825831780891535}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:19,609] Trial 239 finished with value: 0.008410829990434143
and parameters: {'learning_rate': 0.28112786195919554, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3768906114136547, 'subsample':
0.8827613259865471}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:20,042] Trial 240 finished with value: 0.008250247295597072
and parameters: {'learning_rate': 0.28234800212008815, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3734535376742973, 'subsample':
0.8829398144620878}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:20,454] Trial 241 finished with value: 0.008232253050067665
and parameters: {'learning_rate': 0.28203042662904376, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3734805502734309, 'subsample':
0.8829611004825586}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:20,860] Trial 242 finished with value: 0.007960488803074975
and parameters: {'learning_rate': 0.28176434228149805, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3737632233474515, 'subsample':
0.8829653282396267}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:21,346] Trial 243 finished with value: 0.008142751759244966
and parameters: {'learning_rate': 0.2818565585520365, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.37199707434335705, 'subsample':
0.8829898239544842}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:21,750] Trial 244 finished with value: 0.008064529694511605
and parameters: {'learning_rate': 0.2822201103694914, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.37211279684065524, 'subsample':
0.8829991663108672}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:22,203] Trial 245 finished with value: 0.008872707981726975
and parameters: {'learning_rate': 0.28198086236133457, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.37224947045458395, 'subsample':
0.8829770665429049}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:22,597] Trial 246 finished with value: 0.008800526181751067
and parameters: {'learning_rate': 0.28255436854680216, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.3705102280797283, 'subsample':
0.8829677214569017}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:23,012] Trial 247 finished with value: 0.009449486687260793
and parameters: {'learning_rate': 0.28415565226591144, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.37141386343491556, 'subsample':
0.8830645169589659}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:23,413] Trial 248 finished with value: 0.007834576073635678
and parameters: {'learning_rate': 0.2803517671398296, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3731168970919806, 'subsample':
0.8829287819627258}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:23,792] Trial 249 finished with value: 0.010027755510265721
and parameters: {'learning_rate': 0.27999324738129067, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.37367387592181794, 'subsample':
0.8829237812275329}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:24,215] Trial 250 finished with value: 0.010304496544079075
and parameters: {'learning_rate': 0.2807017583492329, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.37305693339027435, 'subsample':
0.8800346094933647}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:24,614] Trial 251 finished with value: 0.009173066123889472
and parameters: {'learning_rate': 0.28161325989540165, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.37251557737660673, 'subsample':
0.8831798159475046}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:25,033] Trial 252 finished with value: 0.01019000613168829
and parameters: {'learning_rate': 0.2803083887791131, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3739057419787242, 'subsample':
0.8805033743585289}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:25,457] Trial 253 finished with value: 0.008805618885367383
and parameters: {'learning_rate': 0.27964591438735276, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.37156369847143017, 'subsample':
0.883039895348548}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:25,859] Trial 254 finished with value: 0.009243849906607614
and parameters: {'learning_rate': 0.2818714895611252, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.37199327950001293, 'subsample':
0.8831400566831348}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:26,582] Trial 255 finished with value: 0.008562902141013679
and parameters: {'learning_rate': 0.28231909869546246, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.37355938037377506, 'subsample':
0.8829385033053231}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:28,244] Trial 256 finished with value: 0.009013962768513748
and parameters: {'learning_rate': 0.28105030902732575, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.374675122683718, 'subsample':
0.8828931241006186}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:30,423] Trial 257 finished with value: 0.00951160005124131
and parameters: {'learning_rate': 0.28388834166745214, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3702901711345711, 'subsample':
0.883300187396558}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:34,895] Trial 258 finished with value: 0.008956898797453343
and parameters: {'learning_rate': 0.28268285628435386, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.37294712690865317, 'subsample':
0.8830488170893124}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:35,883] Trial 259 finished with value: 0.007654730426549782
and parameters: {'learning_rate': 0.27904426991256487, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3695449498756913, 'subsample':
0.8828724320812653}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:36,324] Trial 260 finished with value: 0.009930291326974715
and parameters: {'learning_rate': 0.278937112744384, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3711224380723647, 'subsample':
0.8826732429492826}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:36,747] Trial 261 finished with value: 0.008831909051568087
and parameters: {'learning_rate': 0.28043732757251605, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.36957596739268034, 'subsample':
0.8828461116628509}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:37,208] Trial 262 finished with value: 0.008397424090346977
and parameters: {'learning_rate': 0.2796022754847135, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.37443162404263913, 'subsample':
0.8831601489733347}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:37,606] Trial 263 finished with value: 0.008643316455413419
and parameters: {'learning_rate': 0.2817534553963516, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3719266370685246, 'subsample':
0.882981497685066 4}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:38,024] Trial 264 finished with value: 0.008870034677476607
and parameters: {'learning_rate': 0.2791701676722028, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.37308917138537856, 'subsample':
0.8827069591462868}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:38,434] Trial 265 finished with value: 0.008720712405774721
and parameters: {'learning_rate': 0.2811994944721279, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.36952424330498135, 'subsample':
0.8830761331326744}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:38,824] Trial 266 finished with value: 0.009209344690638907
and parameters: {'learning_rate': 0.2857212060481351, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.3741934881452636, 'subsample':
0.884170086257997}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:39,247] Trial 267 finished with value: 0.009720887898184196
and parameters: {'learning_rate': 0.28392242417026564, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3681288427048322, 'subsample':
0.8828174651389579}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:39,649] Trial 268 finished with value: 0.008552875948414475
and parameters: {'learning_rate': 0.28247998728891544, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.36733854699877283, 'subsample':
0.882961339884722 1}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:40,074] Trial 269 finished with value: 0.009577178346530161
and parameters: {'learning_rate': 0.2801816622296031, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.37257486752680447, 'subsample':
0.8832405449346855}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:40,477] Trial 270 finished with value: 0.008904247083871091
and parameters: {'learning_rate': 0.2847919107769272, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3707625782090362, 'subsample':
0.8828502413848064}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:40,890] Trial 271 finished with value: 0.009650937193068056
and parameters: {'learning_rate': 0.278418291563053, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3736517820199892, 'subsample':
0.88308722822675}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:41,350] Trial 272 finished with value: 0.008655093066163869
and parameters: {'learning_rate': 0.2834057128937678, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.37492549178370294, 'subsample':
0.8829477161384531}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:41,781] Trial 273 finished with value: 0.009067005416731406
and parameters: {'learning_rate': 0.28153501540335535, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3719893102893462, 'subsample':
0.8802319665297356}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:42,226] Trial 274 finished with value: 0.009576237123300494
and parameters: {'learning_rate': 0.28070540664382265, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3733705448655752, 'subsample':
0.8811860686538592}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:42,641] Trial 275 finished with value: 0.010159580908566288
and parameters: {'learning_rate': 0.28245707205151066, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3824644994524324, 'subsample':
0.8824595355233911}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:43,038] Trial 276 finished with value: 0.009805745316416209
and parameters: {'learning_rate': 0.2798721669826603, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.37519271467893595, 'subsample':
0.8827320398546223}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:43,497] Trial 277 finished with value: 0.009146952922712248
and parameters: {'learning_rate': 0.2816037614400202, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.38392373375867206, 'subsample':
0.882595179459112}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:43,896] Trial 278 finished with value: 0.008359386993678481
and parameters: {'learning_rate': 0.2831873308697238, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.38777874168793347, 'subsample':
0.8828486410055894}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:44,375] Trial 279 finished with value: 0.008065452962718215
and parameters: {'learning_rate': 0.2732633179371526, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3741797298067645, 'subsample':
0.8815070936545253}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:44,800] Trial 280 finished with value: 0.009476827064254328
and parameters: {'learning_rate': 0.2788085195838467, 'max_depth': 7,
'n_estimators': 467, 'reg_lambda': 0.3717115154877906, 'subsample':
0.883150722112559}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:45,547] Trial 281 finished with value: 0.0096981773515857
and parameters: {'learning_rate': 0.2843445978044646, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.38612906568317895, 'subsample':
0.8816855514478648}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:47,340] Trial 282 finished with value: 0.00973640584839322
and parameters: {'learning_rate': 0.2809305704647474, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3850810429134661, 'subsample':
0.8815462508883406}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:49,923] Trial 283 finished with value: 0.00886744112884762
and parameters: {'learning_rate': 0.2824762287408808, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3728591580647893, 'subsample':
0.8830121174424348}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:50,344] Trial 284 finished with value: 0.009546233932783706
and parameters: {'learning_rate': 0.2835440297836982, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.3687896001584266, 'subsample':
0.8832892929665814}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:50,795] Trial 285 finished with value: 0.009428386320216187
and parameters: {'learning_rate': 0.279605109645952, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.370599188343273, 'subsample':
0.8814774255135174}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:51,298] Trial 286 finished with value: 0.01021332470333946
and parameters: {'learning_rate': 0.2503079351719069, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3740479456517305, 'subsample':
0.882944024572785}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:51,749] Trial 287 finished with value: 0.010002444567420238
and parameters: {'learning_rate': 0.28183792789538714, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38691382073919306, 'subsample':
0.8812619277033902}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:52,170] Trial 288 finished with value: 0.010193590184730913
and parameters: {'learning_rate': 0.27286081963640413, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.38806391669976953, 'subsample':
0.8833974156837631}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:52,980] Trial 289 finished with value: 0.008886524213156945
and parameters: {'learning_rate': 0.2853455195561577, 'max_depth': 9,
'n_estimators': 462, 'reg_lambda': 0.3756906522141627, 'subsample':
0.8819081333094397}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:53,395] Trial 290 finished with value: 0.008949293600293668
and parameters: {'learning_rate': 0.28068090944775503, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.3525652965189196, 'subsample':
0.8809059179761953}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:53,834] Trial 291 finished with value: 0.008668840041065131
and parameters: {'learning_rate': 0.28298848281373584, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.36559965673514977, 'subsample':
0.8813597262079909}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:54,251] Trial 292 finished with value: 0.010514224605997963
and parameters: {'learning_rate': 0.27351901706813736, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.38458432656891733, 'subsample':
0.8831067637030043}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:54,673] Trial 293 finished with value: 0.00865231398651572
and parameters: {'learning_rate': 0.2778245555538551, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3730187143907393, 'subsample':
0.8818032500723902}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:55,091] Trial 294 finished with value: 0.008044425180412087
and parameters: {'learning_rate': 0.28173601521820824, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38630203485494724, 'subsample':
0.8828613538069586}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:55,510] Trial 295 finished with value: 0.009580583624872274
and parameters: {'learning_rate': 0.2813391564360385, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.385895727165533, 'subsample':
0.882668070887304}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:55,950] Trial 296 finished with value: 0.008519144415877278
and parameters: {'learning_rate': 0.2798910172237292, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3885946868529774, 'subsample':
0.8827620403425046}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:39:56,386] Trial 297 finished with value: 0.010136383708675655
and parameters: {'learning_rate': 0.2635051806779871, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38310793401739135, 'subsample':
0.8828675602321611}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:56,821] Trial 298 finished with value: 0.007966341742026544
and parameters: {'learning_rate': 0.27888488008974716, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3871488778035092, 'subsample':
0.8829393107634318}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:57,223] Trial 299 finished with value: 0.008849896005078283
and parameters: {'learning_rate': 0.27855260533937537, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.38723883219146316, 'subsample':
0.8830365972973168}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:57,621] Trial 300 finished with value: 0.008548556481102169
and parameters: {'learning_rate': 0.2789938734757831, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.38900681892613054, 'subsample':
0.8831981145035015}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:58,033] Trial 301 finished with value: 0.00972099950506839
and parameters: {'learning_rate': 0.28000412336780595, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3909157832523906, 'subsample':
0.8807147165729534}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:58,440] Trial 302 finished with value: 0.007870596196269654
and parameters: {'learning_rate': 0.2817306734831734, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.38547711854613376, 'subsample':
0.8829474922641702}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:58,839] Trial 303 finished with value: 0.010162432131938988
and parameters: {'learning_rate': 0.2808069716484408, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3853090347512493, 'subsample':
0.8826904504477815}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:59,260] Trial 304 finished with value: 0.00835694459757661
and parameters: {'learning_rate': 0.2768119451619664, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3842452495943315, 'subsample':
0.8828170237772857}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:39:59,649] Trial 305 finished with value: 0.008114530141372046
and parameters: {'learning_rate': 0.28160409585546536, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3866268081220165, 'subsample':
0.8830008774246552}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:00,410] Trial 306 finished with value: 0.008879092485331698
and parameters: {'learning_rate': 0.2777172437094738, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.38653223913209783, 'subsample':
0.8831018198953139}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:02,787] Trial 307 finished with value: 0.010318775627727836
and parameters: {'learning_rate': 0.27938467010214335, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.3873385433812525, 'subsample':
0.8825562257244061}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:05,012] Trial 308 finished with value: 0.009094813346673917
and parameters: {'learning_rate': 0.2809308903770211, 'max_depth': 8,
'n_estimators': 450, 'reg_lambda': 0.3854865314063736, 'subsample':
0.8830024454412406}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:05,492] Trial 309 finished with value: 0.009147326508937008
and parameters: {'learning_rate': 0.2815891882091494, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.3881380808317478, 'subsample':
0.8832139936193203}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:06,232] Trial 310 finished with value: 0.009418459644948666
and parameters: {'learning_rate': 0.28026043645628784, 'max_depth': 9,
'n_estimators': 460, 'reg_lambda': 0.3864868588121187, 'subsample':
0.8828240299985669}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:07,004] Trial 311 finished with value: 0.009767222980712139
and parameters: {'learning_rate': 0.2784066605813121, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.38529055182760646, 'subsample':
0.8829067849939656}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:07,504] Trial 312 finished with value: 0.008957997205953559
and parameters: {'learning_rate': 0.2837476682795347, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3835040430978956, 'subsample':
0.8820047816383672}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:07,919] Trial 313 finished with value: 0.009748231646769445
and parameters: {'learning_rate': 0.2818188485593506, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.38956878797659367, 'subsample':
0.8827408370997706}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:08,374] Trial 314 finished with value: 0.009558185564597158
and parameters: {'learning_rate': 0.2795504933471663, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.38699242626278746, 'subsample':
0.8830941738031044}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:08,799] Trial 315 finished with value: 0.008934817282223879
and parameters: {'learning_rate': 0.28306135609320376, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3846574930758822, 'subsample':
0.8833472743488819}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:09,215] Trial 316 finished with value: 0.00858664355138738
and parameters: {'learning_rate': 0.28065722763454737, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3819348893563058, 'subsample':
0.8829638848470278}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:09,646] Trial 317 finished with value: 0.009506555017325977
and parameters: {'learning_rate': 0.2769178542250178, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3873253020562124, 'subsample':
0.8826552694672551}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:10,043] Trial 318 finished with value: 0.008632331303562713
and parameters: {'learning_rate': 0.2823362972716279, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.38860957902134996, 'subsample':
0.8828261137008425}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:10,503] Trial 319 finished with value: 0.0109413492176046
and parameters: {'learning_rate': 0.27213843663889387, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3855695713132454, 'subsample':
0.8831386966518295}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:10,906] Trial 320 finished with value: 0.008084445199726682
and parameters: {'learning_rate': 0.2844094503624755, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3864858459449647, 'subsample':
0.8830087948139971}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:11,388] Trial 321 finished with value: 0.01052552750087836
and parameters: {'learning_rate': 0.27482523210222304, 'max_depth': 7,
'n_estimators': 487, 'reg_lambda': 0.3903735918040769, 'subsample':
0.8830374657249486}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:11,798] Trial 322 finished with value: 0.008727971517392028
and parameters: {'learning_rate': 0.28461311367338105, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.38603227804286694, 'subsample':
0.8831993453420343}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:12,204] Trial 323 finished with value: 0.009527662134105549
and parameters: {'learning_rate': 0.28631094700161375, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.39179335088187184, 'subsample':
0.8829644037223446}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:12,648] Trial 324 finished with value: 0.009036370173183438
and parameters: {'learning_rate': 0.2762405653775789, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3846337066590498, 'subsample':
0.8847644172699545}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:13,054] Trial 325 finished with value: 0.009167239524733977
and parameters: {'learning_rate': 0.27803878514723585, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.38349432735093003, 'subsample':
0.8830639128526252}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:13,506] Trial 326 finished with value: 0.009570050526185595
and parameters: {'learning_rate': 0.2579123121195177, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.38650572510539244, 'subsample':
0.8832825529935083}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:13,913] Trial 327 finished with value: 0.009155782837705817
and parameters: {'learning_rate': 0.28425062644151694, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3878559846144672, 'subsample':
0.8811023539505713}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:14,338] Trial 328 finished with value: 0.008528779261757227
and parameters: {'learning_rate': 0.27913504402828393, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.3884856349489114, 'subsample':
0.8829056070062908}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:14,773] Trial 329 finished with value: 0.009628783396131463
and parameters: {'learning_rate': 0.28143349010483937, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.38587340459763014, 'subsample':
0.8827202975330862}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:16,265] Trial 330 finished with value: 0.009968541720623341
and parameters: {'learning_rate': 0.28531307861074645, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.38406688719776316, 'subsample':
0.8824771422219204}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:18,270] Trial 331 finished with value: 0.008908090412076537
and parameters: {'learning_rate': 0.2804045441189047, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3897071632536699, 'subsample':
0.88295856942273}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:19,669] Trial 332 finished with value: 0.010516195627059102
and parameters: {'learning_rate': 0.27359250487195974, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3716810085851632, 'subsample':
0.8831319338836163}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:20,090] Trial 333 finished with value: 0.009806196611765107
and parameters: {'learning_rate': 0.2814137153968374, 'max_depth': 9,
'n_estimators': 512, 'reg_lambda': 0.38743089194529934, 'subsample':
0.8828158172843343}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:20,500] Trial 334 finished with value: 0.00857649264366559
and parameters: {'learning_rate': 0.282287926574442, 'max_depth': 8,
'n_estimators': 503, 'reg_lambda': 0.3848989549307788, 'subsample':
0.883025117153096}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:20,935] Trial 335 finished with value: 0.009654778254491044
and parameters: {'learning_rate': 0.28353890403037957, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.3826943401071914, 'subsample':
0.8825929411099628}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:21,358] Trial 336 finished with value: 0.00855711358712471
and parameters: {'learning_rate': 0.2794480589390224, 'max_depth': 8,
'n_estimators': 498, 'reg_lambda': 0.38902201144700566, 'subsample':
0.8827684297184372}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:21,850] Trial 337 finished with value: 0.009552807099764343
and parameters: {'learning_rate': 0.2751067452935522, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3672018499511026, 'subsample':
0.8822785787726536}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:22,278] Trial 338 finished with value: 0.008651218001213372
and parameters: {'learning_rate': 0.2765731147411401, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3865613657703786, 'subsample':
0.8829011061827761}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:22,691] Trial 339 finished with value: 0.010351600309285149
and parameters: {'learning_rate': 0.2713285655756448, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3853789118620877, 'subsample':
0.8831631720375175}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:23,120] Trial 340 finished with value: 0.009916809311153022
and parameters: {'learning_rate': 0.27774324754647356, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.36912907579207294, 'subsample':
0.8857884824182718}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:23,527] Trial 341 finished with value: 0.008621855941556346
and parameters: {'learning_rate': 0.28081168789437255, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.39296558338711524, 'subsample':
0.8830205041954187}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:23,933] Trial 342 finished with value: 0.009207621260429224
and parameters: {'learning_rate': 0.28310779628184723, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3879036155512527, 'subsample':
0.8833573838799992}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:24,345] Trial 343 finished with value: 0.009816139774252514
and parameters: {'learning_rate': 0.28201611059517306, 'max_depth': 8,
'n_estimators': 515, 'reg_lambda': 0.37047389567333283, 'subsample':
0.8816820242850889}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:24,749] Trial 344 finished with value: 0.008478179240066625
and parameters: {'learning_rate': 0.2801127617367652, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3904083565023456, 'subsample':
0.8828775106261483}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:25,192] Trial 345 finished with value: 0.00924388008972644
and parameters: {'learning_rate': 0.27253924042312755, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3858353986990176, 'subsample':
0.8826867500903391}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:25,619] Trial 346 finished with value: 0.010393855027043446
and parameters: {'learning_rate': 0.27445856700382437, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3866609548561931, 'subsample':
0.8830741812261805}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:26,107] Trial 347 finished with value: 0.010504239840269044
and parameters: {'learning_rate': 0.278810287855826, 'max_depth': 7,
'n_estimators': 510, 'reg_lambda': 0.3846330757651457, 'subsample':
0.8832253896188649}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:26,526] Trial 348 finished with value: 0.009652820844847712
and parameters: {'learning_rate': 0.28417361723662177, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.37478622664103095, 'subsample':
0.882780854832831}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:26,921] Trial 349 finished with value: 0.00827228772431159
and parameters: {'learning_rate': 0.2759647720731128, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.389183855545689, 'subsample':
0.8829253045876994}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:27,376] Trial 350 finished with value: 0.009046885357321505
and parameters: {'learning_rate': 0.281252814081516, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.37205974330595043, 'subsample':
0.8830103268804542}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:27,787] Trial 351 finished with value: 0.008018569066318069
and parameters: {'learning_rate': 0.2872819892802, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.387909747723391, 'subsample':
0.8825910464218805}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:28,222] Trial 352 finished with value: 0.008358976500009612
and parameters: {'learning_rate': 0.287110202446584, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.38778319761273744, 'subsample':
0.8826957475818671}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:28,630] Trial 353 finished with value: 0.009878783184121987
and parameters: {'learning_rate': 0.2888062157822983, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.38987298035093143, 'subsample':
0.882434500643475}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:29,035] Trial 354 finished with value: 0.009771165517120704
and parameters: {'learning_rate': 0.28244249274544575, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3885613524498344, 'subsample':
0.882584308058978}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:29,446] Trial 355 finished with value: 0.010193688367763598
and parameters: {'learning_rate': 0.28981691140388766, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.39145653619934806, 'subsample':
0.8821626029952048}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:31,119] Trial 356 finished with value: 0.010180731403496431
and parameters: {'learning_rate': 0.28033961554404097, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.37119896053084567, 'subsample':
0.8815423262942335}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:32,847] Trial 357 finished with value: 0.00950856027781854
and parameters: {'learning_rate': 0.28306582857076396, 'max_depth': 9,
'n_estimators': 471, 'reg_lambda': 0.37470703277546413, 'subsample':
0.8827944868177352}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:34,595] Trial 358 finished with value: 0.010081632350918556
and parameters: {'learning_rate': 0.2861701289470269, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.383335044492775, 'subsample':
0.8829187509657533}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:35,022] Trial 359 finished with value: 0.010086449381188632
and parameters: {'learning_rate': 0.2911227617274162, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.37564986958261637, 'subsample':
0.88313255681364}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:35,454] Trial 360 finished with value: 0.009973649518016919
and parameters: {'learning_rate': 0.28742859531128234, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3883736484099459, 'subsample':
0.8813566690603682}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:35,867] Trial 361 finished with value: 0.009627325396643112
and parameters: {'learning_rate': 0.2850233695223439, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.3840659107193837, 'subsample':
0.8830275086066005}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:36,293] Trial 362 finished with value: 0.01052875986885344
and parameters: {'learning_rate': 0.2788769840194541, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.37401746079983056, 'subsample':
0.8826291992572555}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:36,754] Trial 363 finished with value: 0.007895377006446795
and parameters: {'learning_rate': 0.281778723344701, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.38755118232259156, 'subsample':
0.8828484788830108}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:37,198] Trial 364 finished with value: 0.008091293533737123
and parameters: {'learning_rate': 0.28132749639865556, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.38746168605950226, 'subsample':
0.8827740878119326}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:37,657] Trial 365 finished with value: 0.010996428319351721
and parameters: {'learning_rate': 0.2994110162501946, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.38722537295053444, 'subsample':
0.882872005606618}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:38,065] Trial 366 finished with value: 0.010269462677006657
and parameters: {'learning_rate': 0.28137675241879984, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.3861221438670438, 'subsample':
0.8832540536399487}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:38,476] Trial 367 finished with value: 0.008854285873235796
and parameters: {'learning_rate': 0.2801723601097705, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.3876550374730779, 'subsample':
0.882980404925026}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:38,917] Trial 368 finished with value: 0.009452459495333737
and parameters: {'learning_rate': 0.28203468331533466, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3855406139418589, 'subsample':
0.882720839731558}. Best is trial 133 with value: 0.007651281092622342.

[I 2024-08-30 19:40:39,332] Trial 369 finished with value: 0.008728227391584555
and parameters: {'learning_rate': 0.2835675596063654, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.3867215713720938, 'subsample':
0.8831016546060773}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:39,763] Trial 370 finished with value: 0.008472031305892714
and parameters: {'learning_rate': 0.2807170398000074, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.38751801413206977, 'subsample':
0.8828068595306329}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:40,173] Trial 371 finished with value: 0.008953937668813618
and parameters: {'learning_rate': 0.28263570039767194, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3985270621057049, 'subsample':
0.8829426737696303}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:40,603] Trial 372 finished with value: 0.01000351202807467
and parameters: {'learning_rate': 0.2794049778666919, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.3850442609736326, 'subsample':
0.8825413501773044}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:41,038] Trial 373 finished with value: 0.008793075942936447
and parameters: {'learning_rate': 0.28138278486360135, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3892165849738847, 'subsample':
0.8831619300721848}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:41,452] Trial 374 finished with value: 0.010141509202323942
and parameters: {'learning_rate': 0.2841479474885607, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.3861023835850308, 'subsample':
0.8827526124863063}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:41,888] Trial 375 finished with value: 0.009702715705682813
and parameters: {'learning_rate': 0.2824852698711414, 'max_depth': 8,
'n_estimators': 506, 'reg_lambda': 0.3723844447526171, 'subsample':
0.8834692631266444}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:42,288] Trial 376 finished with value: 0.008632262435153408
and parameters: {'learning_rate': 0.28008714243570515, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3697952196175267, 'subsample':
0.8830310887569933}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:42,741] Trial 377 finished with value: 0.008408907742958511
and parameters: {'learning_rate': 0.2782021077468393, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3881568353620445, 'subsample':
0.8828821104657785}. Best is trial 133 with value: 0.007651281092622342.
[I 2024-08-30 19:40:43,121] Trial 378 finished with value: 0.0075208460473355
and parameters: {'learning_rate': 0.2812781316486757, 'max_depth': 9,
'n_estimators': 462, 'reg_lambda': 0.39029369579760115, 'subsample':
0.8827014088838471}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:43,514] Trial 379 finished with value: 0.010411117230878583
and parameters: {'learning_rate': 0.28090791702836204, 'max_depth': 9,
'n_estimators': 463, 'reg_lambda': 0.3914308599684207, 'subsample':
0.8824315506802227}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:43,947] Trial 380 finished with value: 0.009356897075666708
and parameters: {'learning_rate': 0.2792119894062741, 'max_depth': 9,
'n_estimators': 469, 'reg_lambda': 0.39060738006286483, 'subsample':
0.8826553619827928}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:40:44,509] Trial 381 finished with value: 0.009334016265943358
and parameters: {'learning_rate': 0.28153468748361593, 'max_depth': 9,
'n_estimators': 456, 'reg_lambda': 0.3899371472423977, 'subsample':
0.8825881299762606}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:45,956] Trial 382 finished with value: 0.008463592414226227
and parameters: {'learning_rate': 0.2829878577371945, 'max_depth': 9,
'n_estimators': 465, 'reg_lambda': 0.39402981705528844, 'subsample':
0.8818673992611047}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:47,580] Trial 383 finished with value: 0.009694464266241994
and parameters: {'learning_rate': 0.2800185187764589, 'max_depth': 9,
'n_estimators': 466, 'reg_lambda': 0.38892265027344763, 'subsample':
0.8826831201612524}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:49,367] Trial 384 finished with value: 0.00952176957508599
and parameters: {'learning_rate': 0.2850686986202352, 'max_depth': 9,
'n_estimators': 462, 'reg_lambda': 0.3906983077331354, 'subsample':
0.8828294686261677}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:49,777] Trial 385 finished with value: 0.009789433001194156
and parameters: {'learning_rate': 0.277422821320731, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3874619015352589, 'subsample':
0.8810390144924968}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:50,203] Trial 386 finished with value: 0.009429952347054998
and parameters: {'learning_rate': 0.2808594093688142, 'max_depth': 9,
'n_estimators': 470, 'reg_lambda': 0.38652553326629413, 'subsample':
0.8825262097755038}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:50,602] Trial 387 finished with value: 0.00919197904623377
and parameters: {'learning_rate': 0.2819598547610508, 'max_depth': 9,
'n_estimators': 459, 'reg_lambda': 0.38950133787907987, 'subsample':
0.8828118824649532}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:51,030] Trial 388 finished with value: 0.008922112053230681
and parameters: {'learning_rate': 0.28395206104748133, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.3926974833949106, 'subsample':
0.8823799522701088}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:51,487] Trial 389 finished with value: 0.009865992294197736
and parameters: {'learning_rate': 0.2787871581134215, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.3881358012950931, 'subsample':
0.8827053894931426}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:51,968] Trial 390 finished with value: 0.009279675355882415
and parameters: {'learning_rate': 0.2822389627123556, 'max_depth': 9,
'n_estimators': 463, 'reg_lambda': 0.3842090982195949, 'subsample':
0.8829310656767161}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:52,462] Trial 391 finished with value: 0.00928121696965392
and parameters: {'learning_rate': 0.287863079213579, 'max_depth': 7,
'n_estimators': 465, 'reg_lambda': 0.3852979414076979, 'subsample':
0.8832233642716735}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:52,892] Trial 392 finished with value: 0.008635312510692465
and parameters: {'learning_rate': 0.2797469111375761, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.38652186002115874, 'subsample':
0.8830785890940532}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:40:53,339] Trial 393 finished with value: 0.008440394943029374
and parameters: {'learning_rate': 0.2835034798221488, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3872528630676018, 'subsample':
0.8828831485252712}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:53,770] Trial 394 finished with value: 0.009303895024520685
and parameters: {'learning_rate': 0.2857983421975652, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.38248538263112297, 'subsample':
0.8827662392284817}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:54,206] Trial 395 finished with value: 0.008955050622582655
and parameters: {'learning_rate': 0.2920171762422245, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.388631414191768, 'subsample':
0.8830104215412143}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:54,648] Trial 396 finished with value: 0.009912083173416157
and parameters: {'learning_rate': 0.28106093343098154, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.39009342925783996, 'subsample':
0.8826424396938054}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:55,114] Trial 397 finished with value: 0.009265397387568276
and parameters: {'learning_rate': 0.27031559953009104, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.38573733407520455, 'subsample':
0.8833545660021432}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:55,574] Trial 398 finished with value: 0.009345113441766379
and parameters: {'learning_rate': 0.27797870682663056, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.38384989506751693, 'subsample':
0.8831215276917282}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:56,014] Trial 399 finished with value: 0.00990553468260456
and parameters: {'learning_rate': 0.28295681944785916, 'max_depth': 9,
'n_estimators': 460, 'reg_lambda': 0.391371506493882, 'subsample':
0.882884245669176}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:56,523] Trial 400 finished with value: 0.007744711312185641
and parameters: {'learning_rate': 0.28053458173788587, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.3873312327521876, 'subsample':
0.8827651025191342}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:56,971] Trial 401 finished with value: 0.00812566221480577
and parameters: {'learning_rate': 0.2804073785318326, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.387315442334103, 'subsample':
0.8827566514852214}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:57,418] Trial 402 finished with value: 0.010361146033455743
and parameters: {'learning_rate': 0.2796490437493454, 'max_depth': 8,
'n_estimators': 451, 'reg_lambda': 0.38681901533542, 'subsample':
0.8825125249835519}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:57,830] Trial 403 finished with value: 0.009607036923243582
and parameters: {'learning_rate': 0.28032854580037186, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.38470210827641604, 'subsample':
0.8803652865323192}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:58,232] Trial 404 finished with value: 0.010747148936068644
and parameters: {'learning_rate': 0.2807727175434616, 'max_depth': 8,
'n_estimators': 451, 'reg_lambda': 0.38778127506857396, 'subsample':
0.8826154473077252}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:40:58,664] Trial 405 finished with value: 0.009614675456449135
and parameters: {'learning_rate': 0.2790895976673093, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.38599710000034615, 'subsample':
0.8827362546346418}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:40:59,076] Trial 406 finished with value: 0.008776173088542815
and parameters: {'learning_rate': 0.28154761903582703, 'max_depth': 8,
'n_estimators': 450, 'reg_lambda': 0.38709791378169267, 'subsample':
0.8827713805133063}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:00,606] Trial 407 finished with value: 0.00913615428591668
and parameters: {'learning_rate': 0.2802705577599504, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.36295613595207377, 'subsample':
0.8826511787601409}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:02,386] Trial 408 finished with value: 0.008864634980367608
and parameters: {'learning_rate': 0.278253654168521, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.3851211357733435, 'subsample':
0.8828231469856538}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:04,219] Trial 409 finished with value: 0.010669253201161306
and parameters: {'learning_rate': 0.2794155564365947, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.3880514548380585, 'subsample':
0.8825466900186741}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:04,629] Trial 410 finished with value: 0.009282568758553 98
and parameters: {'learning_rate': 0.28133394546325696, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.3861088385691233, 'subsample':
0.8829619114969598}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:05,078] Trial 411 finished with value: 0.009548255881485508
and parameters: {'learning_rate': 0.2821708782402229, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.3887407283387901, 'subsample':
0.8827414989729043}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:05,479] Trial 412 finished with value: 0.009656932771565 48
and parameters: {'learning_rate': 0.2801674823567135, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.38667599885578413, 'subsample':
0.8822861427403106}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:05,919] Trial 413 finished with value: 0.008605064522451 62
and parameters: {'learning_rate': 0.28103934256679464, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3852358991078441, 'subsample':
0.8828673424884589}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:06,341] Trial 414 finished with value: 0.009378115422020147
and parameters: {'learning_rate': 0.2786653307548634, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.387486965055076, 'subsample':
0.8830379910873201}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:06,763] Trial 415 finished with value: 0.008705305579171416
and parameters: {'learning_rate': 0.2826869303719428, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.38404624687156635, 'subsample':
0.882859748929058}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:07,209] Trial 416 finished with value: 0.010300247607844343
and parameters: {'learning_rate': 0.2816264012958673, 'max_depth': 8,
'n_estimators': 501, 'reg_lambda': 0.38891767318207, 'subsample':
0.8826808283677199}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:07,653] Trial 417 finished with value: 0.008195354094783025
and parameters: {'learning_rate': 0.2799103182344335, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.39241415094828513, 'subsample':
0.8832543620553656}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:08,114] Trial 418 finished with value: 0.008781266960023217
and parameters: {'learning_rate': 0.28070527044156485, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3861350424971035, 'subsample':
0.8831186659441693}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:08,521] Trial 419 finished with value: 0.008157273627363059
and parameters: {'learning_rate': 0.2843012335875166, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.3873156040219943, 'subsample':
0.8829625659252363}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:08,972] Trial 420 finished with value: 0.010386524519132507
and parameters: {'learning_rate': 0.2775917526939442, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3895395967383761, 'subsample':
0.8844610183696333}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:09,399] Trial 421 finished with value: 0.009427281650185018
and parameters: {'learning_rate': 0.2824368504424768, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.38288834191795923, 'subsample':
0.882504877853681}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:09,830] Trial 422 finished with value: 0.008845422409048186
and parameters: {'learning_rate': 0.2795483075620419, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.38456868829698243, 'subsample':
0.8827900677303028}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:10,250] Trial 423 finished with value: 0.009928801917827104
and parameters: {'learning_rate': 0.28137300732949594, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.38564407372780657, 'subsample':
0.8830449893243416}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:10,664] Trial 424 finished with value: 0.008369370547598455
and parameters: {'learning_rate': 0.2835106307282256, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38839052405543506, 'subsample':
0.8829045874677147}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:11,130] Trial 425 finished with value: 0.009608770810512363
and parameters: {'learning_rate': 0.27889791597622615, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.3814311917579519, 'subsample':
0.8826828693537794}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:11,542] Trial 426 finished with value: 0.010347529896126681
and parameters: {'learning_rate': 0.2820716442879981, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3866328355746699, 'subsample':
0.8836970022258003}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:12,001] Trial 427 finished with value: 0.009021749149149967
and parameters: {'learning_rate': 0.2804581264326533, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3904405128829077, 'subsample':
0.8827877528655189}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:12,419] Trial 428 finished with value: 0.008879244508927644
and parameters: {'learning_rate': 0.2830506277769902, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.387723381833928, 'subsample':
0.8831894540428388}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:12,831] Trial 429 finished with value: 0.008710003473387122
and parameters: {'learning_rate': 0.2867895561727313, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3680547986041819, 'subsample':
0.8829793177136602}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:13,269] Trial 430 finished with value: 0.011032838234623761
and parameters: {'learning_rate': 0.2767892544991536, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3893932951823789, 'subsample':
0.882606192523053}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:13,687] Trial 431 finished with value: 0.00900470462879398
and parameters: {'learning_rate': 0.28183688280038044, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.39655013954152507, 'subsample':
0.8828737020097381}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:14,128] Trial 432 finished with value: 0.009904482922003436
and parameters: {'learning_rate': 0.2849731381322344, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.3856162731315404, 'subsample':
0.8830436264023792}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:15,590] Trial 433 finished with value: 0.010822501200061025
and parameters: {'learning_rate': 0.28059886787117067, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.38665184147986303, 'subsample':
0.8827294115357528}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:17,235] Trial 434 finished with value: 0.008499411130284297
and parameters: {'learning_rate': 0.2783977136605863, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38352495531622754, 'subsample':
0.8831397557092437}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:19,254] Trial 435 finished with value: 0.01004619866567279
and parameters: {'learning_rate': 0.2795954279432054, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.38482199685117063, 'subsample':
0.8824096641137813}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:19,695] Trial 436 finished with value: 0.00878841083577114
and parameters: {'learning_rate': 0.28274618693112163, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.3882064696432893, 'subsample':
0.8829170816648608}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:20,153] Trial 437 finished with value: 0.008302024388266304
and parameters: {'learning_rate': 0.28127993511269306, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.3859570167794996, 'subsample':
0.8827883963406324}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:20,611] Trial 438 finished with value: 0.008590846847838786
and parameters: {'learning_rate': 0.28364653366801634, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.3871900083777687, 'subsample':
0.8832709790359787}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:21,071] Trial 439 finished with value: 0.008035290023734864
and parameters: {'learning_rate': 0.280647642203817, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3911285736706132, 'subsample':
0.8829994670495819}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:21,514] Trial 440 finished with value: 0.009582361484700012
and parameters: {'learning_rate': 0.2819739698215646, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.391126300104102, 'subsample':
0.8834104185129268}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:22,009] Trial 441 finished with value: 0.008059800787537447
and parameters: {'learning_rate': 0.2771276064271217, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.39218170591910073, 'subsample':
0.88309980988505}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:22,456] Trial 442 finished with value: 0.00829261033131528
and parameters: {'learning_rate': 0.2771819875938005, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3945058038980871, 'subsample':
0.8831247582810965}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:22,869] Trial 443 finished with value: 0.009791201235203268
and parameters: {'learning_rate': 0.27767575841838904, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3930602192231719, 'subsample':
0.8832515182302093}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:23,283] Trial 444 finished with value: 0.008231365865134873
and parameters: {'learning_rate': 0.27610553596171444, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3934977549351521, 'subsample':
0.8830652359719771}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:23,715] Trial 445 finished with value: 0.007653538514926782
and parameters: {'learning_rate': 0.27665707118556254, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.39254839183866747, 'subsample':
0.8830195983182368}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:24,119] Trial 446 finished with value: 0.008262426552392 52
and parameters: {'learning_rate': 0.27646352694068144, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3920050626507913, 'subsample':
0.8831968090566031}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:24,551] Trial 447 finished with value: 0.009042029933309726
and parameters: {'learning_rate': 0.27663897609658905, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3920184179689039, 'subsample':
0.8852002167990832}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:24,962] Trial 448 finished with value: 0.008205033680595 59
and parameters: {'learning_rate': 0.27720548998298605, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.39273519358546366, 'subsample':
0.8829603098972246}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:25,438] Trial 449 finished with value: 0.009449085625085 08
and parameters: {'learning_rate': 0.27591594080176013, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.39382645497312135, 'subsample':
0.8841152375484114}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:25,876] Trial 450 finished with value: 0.009375144726199098
and parameters: {'learning_rate': 0.27320437294033995, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.39589120523987653, 'subsample':
0.8831100400183313}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:26,302] Trial 451 finished with value: 0.008886935564329918
and parameters: {'learning_rate': 0.2784079866187598, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3925347603442581, 'subsample':
0.8829292840717642}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:26,732] Trial 452 finished with value: 0.009996693584486 56
and parameters: {'learning_rate': 0.27791597409787605, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.39129554376809544, 'subsample':
0.8807825805459749}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:27,145] Trial 453 finished with value: 0.009327324373565336
and parameters: {'learning_rate': 0.2745517411091182, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3916087357174289, 'subsample':
0.8833560093679838}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:27,595] Trial 454 finished with value: 0.00864281231667063
and parameters: {'learning_rate': 0.27203574459798957, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3908468401944378, 'subsample':
0.8828804106455173}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:27,999] Trial 455 finished with value: 0.010504525641064882
and parameters: {'learning_rate': 0.29467738059844223, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.39348764811949327, 'subsample':
0.8830583306250259}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:28,419] Trial 456 finished with value: 0.008570434281948648
and parameters: {'learning_rate': 0.275081398466867, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3945528536112398, 'subsample':
0.8828334374404804}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:28,872] Trial 457 finished with value: 0.008514667419377649
and parameters: {'learning_rate': 0.27728938809693693, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3904720160186669, 'subsample':
0.8835367396542141}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:29,655] Trial 458 finished with value: 0.00905732058184585
and parameters: {'learning_rate': 0.2544273008042856, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.39240067135712686, 'subsample':
0.8805891418263314}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:31,185] Trial 459 finished with value: 0.010254092170884832
and parameters: {'learning_rate': 0.2787617871496504, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3550984404657391, 'subsample':
0.8831630691510212}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:33,907] Trial 460 finished with value: 0.009981276376346323
and parameters: {'learning_rate': 0.27911587448781733, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3904087395045768, 'subsample':
0.8826046951854087}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:34,372] Trial 461 finished with value: 0.009875536764908393
and parameters: {'learning_rate': 0.2886621094478865, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.3920588222766587, 'subsample':
0.8829811444038653}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:34,804] Trial 462 finished with value: 0.008024173986060631
and parameters: {'learning_rate': 0.2756819205601632, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3913244397559457, 'subsample':
0.8828513657902973}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:35,246] Trial 463 finished with value: 0.008373767260664423
and parameters: {'learning_rate': 0.27556020423515304, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3917995533313482, 'subsample':
0.8832958837570756}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:35,669] Trial 464 finished with value: 0.010404304424664598
and parameters: {'learning_rate': 0.2743581838161468, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3908633779930298, 'subsample':
0.88305567669831}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:36,109] Trial 465 finished with value: 0.008172935393752528
and parameters: {'learning_rate': 0.2756610354030577, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.39276293036973753, 'subsample':
0.8828951701480188}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:36,524] Trial 466 finished with value: 0.009188790556667655
and parameters: {'learning_rate': 0.27723968227713813, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38988179973734405, 'subsample':
0.8829957681357948}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:36,938] Trial 467 finished with value: 0.008465431882661344
and parameters: {'learning_rate': 0.2761465021363517, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.39373745357969825, 'subsample':
0.883175116206611}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:37,391] Trial 468 finished with value: 0.009214834162774072
and parameters: {'learning_rate': 0.2740821730674606, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.39149480590406627, 'subsample':
0.8828475230587696}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:37,797] Trial 469 finished with value: 0.008815145520194077
and parameters: {'learning_rate': 0.276856352600552, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.3731241860387943, 'subsample':
0.8827085338283998}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:38,245] Trial 470 finished with value: 0.009017248260746374
and parameters: {'learning_rate': 0.2736242906029684, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.38993936999391193, 'subsample':
0.8829589423772879}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:38,648] Trial 471 finished with value: 0.010000504055927882
and parameters: {'learning_rate': 0.27275900040678813, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.3907605239650884, 'subsample':
0.8830934207442005}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:39,053] Trial 472 finished with value: 0.009140052152451549
and parameters: {'learning_rate': 0.2779805942677812, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3738112583878535, 'subsample':
0.882849860128746}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:39,476] Trial 473 finished with value: 0.008401608966141698
and parameters: {'learning_rate': 0.27641494882556383, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.38960187194842416, 'subsample':
0.8832292528711276}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:39,875] Trial 474 finished with value: 0.010865854099614826
and parameters: {'learning_rate': 0.27509898796367577, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.37570698492877225, 'subsample':
0.8826324104551176}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:40,332] Trial 475 finished with value: 0.008285461882263952
and parameters: {'learning_rate': 0.2708552178860731, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.39285850643677184, 'subsample':
0.8829895547258241}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:40,732] Trial 476 finished with value: 0.010579818896439767
and parameters: {'learning_rate': 0.2903664476788596, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.3664383302392373, 'subsample':
0.8827977062955029}. Best is trial 378 with value: 0.0075208460473355.

[I 2024-08-30 19:41:41,219] Trial 477 finished with value: 0.008880590963986926
and parameters: {'learning_rate': 0.27547900608064946, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.3956128458788318, 'subsample':
0.8830989780328026}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:41,630] Trial 478 finished with value: 0.01030603895360544
and parameters: {'learning_rate': 0.2851076680402383, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.39102977316997256, 'subsample':
0.8829178762804312}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:42,033] Trial 479 finished with value: 0.009973711989095238
and parameters: {'learning_rate': 0.27827933763984997, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3894602886799382, 'subsample':
0.8827053080909268}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:42,477] Trial 480 finished with value: 0.009444921069015929
and parameters: {'learning_rate': 0.27950195039222964, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.3710016792573398, 'subsample':
0.8824969851898998}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:42,880] Trial 481 finished with value: 0.010331452021294667
and parameters: {'learning_rate': 0.2844537515697595, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.39167277195826117, 'subsample':
0.8830260300915656}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:43,337] Trial 482 finished with value: 0.008612910206187107
and parameters: {'learning_rate': 0.27326452178905797, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.37402062124824503, 'subsample':
0.8829026779928055}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:43,767] Trial 483 finished with value: 0.010607427286882146
and parameters: {'learning_rate': 0.2767545937028969, 'max_depth': 8,
'n_estimators': 530, 'reg_lambda': 0.3725590701595007, 'subsample':
0.8838938954404478}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:44,461] Trial 484 finished with value: 0.008986128181933594
and parameters: {'learning_rate': 0.28333261499909057, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.38908628001729373, 'subsample':
0.8833099326538608}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:46,251] Trial 485 finished with value: 0.008253784739588533
and parameters: {'learning_rate': 0.2777582207645305, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.39428084064691454, 'subsample':
0.8827884637249589}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:47,594] Trial 486 finished with value: 0.008747740694964338
and parameters: {'learning_rate': 0.2743955697974807, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.36465653402134246, 'subsample':
0.8831637935303384}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:48,719] Trial 487 finished with value: 0.010317856261372027
and parameters: {'learning_rate': 0.27920824800531957, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.36988202021457234, 'subsample':
0.8826567743824266}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:49,154] Trial 488 finished with value: 0.008814149731975 53
and parameters: {'learning_rate': 0.28577899032377574, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.3920470283190847, 'subsample':
0.8834172359356055}. Best is trial 378 with value: 0.0075208460473355.

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[I 2024-08-30 19:41:49,598] Trial 489 finished with value: 0.008556464808726684
and parameters: {'learning_rate': 0.27177026225870016, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.39053846781489066, 'subsample':
0.8830013811054362}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:50,014] Trial 490 finished with value: 0.009242440434819789
and parameters: {'learning_rate': 0.2827268233803787, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.38878644146488983, 'subsample':
0.882848659967416}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:50,429] Trial 491 finished with value: 0.010416687229607004
and parameters: {'learning_rate': 0.2800342699890484, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.37431961359397425, 'subsample':
0.8830928650260885}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:50,876] Trial 492 finished with value: 0.008628641929301411
and parameters: {'learning_rate': 0.27592135256679906, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.3752071006424427, 'subsample':
0.8829036368800336}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:51,313] Trial 493 finished with value: 0.008770794086878506
and parameters: {'learning_rate': 0.28705620103658286, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3931000372203361, 'subsample':
0.8827388810370629}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:51,772] Trial 494 finished with value: 0.009132493246981082
and parameters: {'learning_rate': 0.2838805895944106, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.39002858251550515, 'subsample':
0.8825479613018673}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:52,275] Trial 495 finished with value: 0.008834246074006458
and parameters: {'learning_rate': 0.2786374128361614, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.3729874018997256, 'subsample':
0.8830017344570671}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:53,307] Trial 496 finished with value: 0.008879689841752804
and parameters: {'learning_rate': 0.27718513596886357, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.37140394472888155, 'subsample':
0.882841035266321}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:53,729] Trial 497 finished with value: 0.00972453005660835
and parameters: {'learning_rate': 0.282429769511673, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.3914722640240993, 'subsample':
0.8831974361581432}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:54,146] Trial 498 finished with value: 0.009553473244266458
and parameters: {'learning_rate': 0.2807015047612252, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.3884875113148986, 'subsample':
0.8827097853181803}. Best is trial 378 with value: 0.0075208460473355.
[I 2024-08-30 19:41:54,565] Trial 499 finished with value: 0.009613779991787483
and parameters: {'learning_rate': 0.28013938547639183, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.3903777582725967, 'subsample':
0.8830967691646102}. Best is trial 378 with value: 0.0075208460473355.

            i=0: {'learning_rate': 0.2812781316486757, 'max_depth': 9,
'n_estimators': 462, 'reg_lambda': 0.39029369579760115, 'subsample':
0.8827014088838471}
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    MSE    i=0: 0.0075208460473355
[9284. 9035. 9152.] [8271.97901154 7913.61985779 9134.98542786] [0.11 0.12 0.  ]
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[I 2024-08-30 19:41:55,100] A new study created in memory with name: no-
name-08f53665-5894-49b6-b744-ce372816b452
[I 2024-08-30 19:41:55,310] Trial 0 finished with value: 0.009996375816752761
and parameters: {'learning_rate': 0.476930444245566, 'max_depth': 9,
'n_estimators': 139, 'reg_lambda': 0.3280137177590359, 'subsample':
0.885181434599117}. Best is trial 0 with value: 0.009996375816752761.
[I 2024-08-30 19:41:55,515] Trial 1 finished with value: 0.010029515825224962
and parameters: {'learning_rate': 0.4761237787103855, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.3128567182661906, 'subsample':
0.8823971825618552}. Best is trial 0 with value: 0.009996375816752761.
[I 2024-08-30 19:41:55,705] Trial 2 finished with value: 0.009026490794203378
and parameters: {'learning_rate': 0.46386252359732544, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3282225329188848, 'subsample':
0.884900045896226}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:55,905] Trial 3 finished with value: 0.011258048116739387
and parameters: {'learning_rate': 0.4728327234945652, 'max_depth': 10,
'n_estimators': 106, 'reg_lambda': 0.31380373104641246, 'subsample':
0.8859066549783786}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:56,118] Trial 4 finished with value: 0.009832071523883353
and parameters: {'learning_rate': 0.4336133442585177, 'max_depth': 10,
'n_estimators': 169, 'reg_lambda': 0.3130458791344546, 'subsample':
0.8843297589683781}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:56,346] Trial 5 finished with value: 0.010235199832224585
and parameters: {'learning_rate': 0.4454309149679765, 'max_depth': 10,
'n_estimators': 169, 'reg_lambda': 0.32953491493274356, 'subsample':
0.8842604804990554}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:56,522] Trial 6 finished with value: 0.010197485713125273
and parameters: {'learning_rate': 0.4963249894950258, 'max_depth': 10,
'n_estimators': 110, 'reg_lambda': 0.2981138039467563, 'subsample':
0.8812365558440642}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:56,732] Trial 7 finished with value: 0.010693115432659902
and parameters: {'learning_rate': 0.4308192227217978, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.31012559097688214, 'subsample':
0.8813328611196947}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:56,953] Trial 8 finished with value: 0.010567430797985125
and parameters: {'learning_rate': 0.46990186955607943, 'max_depth': 8,
'n_estimators': 151, 'reg_lambda': 0.32443175066083324, 'subsample':
0.8854413930006445}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:57,154] Trial 9 finished with value: 0.010911631908932374
and parameters: {'learning_rate': 0.4616504447637112, 'max_depth': 9,
'n_estimators': 122, 'reg_lambda': 0.30855319122406977, 'subsample':
0.8828054911726372}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:57,368] Trial 10 finished with value: 0.010854563323397909
and parameters: {'learning_rate': 0.5269607391720335, 'max_depth': 8,
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'n_estimators': 127, 'reg_lambda': 0.2692542238484155, 'subsample':
0.8801088719373501}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:57,589] Trial 11 finished with value: 0.010856788506183507
and parameters: {'learning_rate': 0.44540220415348875, 'max_depth': 9,
'n_estimators': 156, 'reg_lambda': 0.2820345838586031, 'subsample':
0.8840662390272349}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:57,796] Trial 12 finished with value: 0.010406532272141762
and parameters: {'learning_rate': 0.5003944297030329, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2922418999806581, 'subsample':
0.8842208798691352}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:58,043] Trial 13 finished with value: 0.010722711068997817
and parameters: {'learning_rate': 0.4300264660081801, 'max_depth': 9,
'n_estimators': 170, 'reg_lambda': 0.31854598081149965, 'subsample':
0.8836054868765691}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:58,252] Trial 14 finished with value: 0.010243958829053063
and parameters: {'learning_rate': 0.4534279406601745, 'max_depth': 10,
'n_estimators': 133, 'reg_lambda': 0.2983567797279886, 'subsample':
0.8849053522481876}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:58,472] Trial 15 finished with value: 0.011023807603988394
and parameters: {'learning_rate': 0.49527566438067094, 'max_depth': 9,
'n_estimators': 145, 'reg_lambda': 0.32028035507929586, 'subsample':
0.8833738582678216}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:58,941] Trial 16 finished with value: 0.011369505064263548
and parameters: {'learning_rate': 0.44389815811354555, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.3047405066226741, 'subsample':
0.8846969133295302}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:41:59,932] Trial 17 finished with value: 0.011103731163173692
and parameters: {'learning_rate': 0.46122781064283963, 'max_depth': 8,
'n_estimators': 148, 'reg_lambda': 0.2602286103186305, 'subsample':
0.8857726246723071}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:01,238] Trial 18 finished with value: 0.010800292634449244
and parameters: {'learning_rate': 0.4888693746863622, 'max_depth': 10,
'n_estimators': 138, 'reg_lambda': 0.28621474441976774, 'subsample':
0.8822303977369513}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:03,155] Trial 19 finished with value: 0.010612780499029927
and parameters: {'learning_rate': 0.5122466057940567, 'max_depth': 9,
'n_estimators': 117, 'reg_lambda': 0.3200682660827678, 'subsample':
0.88465934853661}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:03,379] Trial 20 finished with value: 0.011414317686199809
and parameters: {'learning_rate': 0.44048283592316306, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.30461972434166346, 'subsample':
0.8836207732261682}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:03,635] Trial 21 finished with value: 0.009853642549233743
and parameters: {'learning_rate': 0.4624750978695105, 'max_depth': 9,
'n_estimators': 139, 'reg_lambda': 0.3290752861338251, 'subsample':
0.8851931522145593}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:03,851] Trial 22 finished with value: 0.011445722122022798
and parameters: {'learning_rate': 0.4600418816242353, 'max_depth': 9,

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'n_estimators': 132, 'reg_lambda': 0.3297739133394184, 'subsample':
0.8852918636397626}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:04,080] Trial 23 finished with value: 0.011941257293870114
and parameters: {'learning_rate': 0.45227357416764313, 'max_depth': 9,
'n_estimators': 141, 'reg_lambda': 0.32168458300609787, 'subsample':
0.8845121608630288}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:04,331] Trial 24 finished with value: 0.011140093398358144
and parameters: {'learning_rate': 0.4851427333676118, 'max_depth': 9,
'n_estimators': 152, 'reg_lambda': 0.31834902177257857, 'subsample':
0.8859903727675946}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:04,537] Trial 25 finished with value: 0.010603648349088439
and parameters: {'learning_rate': 0.46701895604032545, 'max_depth': 8,
'n_estimators': 121, 'reg_lambda': 0.32315287630532846, 'subsample':
0.8838638592531777}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:04,751] Trial 26 finished with value: 0.011448637640726277
and parameters: {'learning_rate': 0.4366505284057636, 'max_depth': 10,
'n_estimators': 129, 'reg_lambda': 0.31487374436037696, 'subsample':
0.8850839310393455}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:04,975] Trial 27 finished with value: 0.01034080922735176
and parameters: {'learning_rate': 0.4532040962607943, 'max_depth': 9,
'n_estimators': 164, 'reg_lambda': 0.32486223415788607, 'subsample':
0.8855442080020745}. Best is trial 2 with value: 0.009026490794203378.
[I 2024-08-30 19:42:05,209] Trial 28 finished with value: 0.00878925045460259
and parameters: {'learning_rate': 0.48177713561498536, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.3045420962661033, 'subsample':
0.8830924156317007}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:05,423] Trial 29 finished with value: 0.010230441265368182
and parameters: {'learning_rate': 0.48139804471615394, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.3029378110012473, 'subsample':
0.882917913574276}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:05,622] Trial 30 finished with value: 0.011362767129714126
and parameters: {'learning_rate': 0.5072877620920416, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.29280906612069874, 'subsample':
0.8833323166774062}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:05,837] Trial 31 finished with value: 0.010600807848571486
and parameters: {'learning_rate': 0.48055748044307883, 'max_depth': 10,
'n_estimators': 138, 'reg_lambda': 0.32621563581180585, 'subsample':
0.8850489702479644}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:06,061] Trial 32 finished with value: 0.009850447507675962
and parameters: {'learning_rate': 0.47516251276786536, 'max_depth': 10,
'n_estimators': 134, 'reg_lambda': 0.3083602232430058, 'subsample':
0.8822671840102685}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:06,302] Trial 33 finished with value: 0.010891891770971208
and parameters: {'learning_rate': 0.4737373074452773, 'max_depth': 10,
'n_estimators': 127, 'reg_lambda': 0.3093318405123903, 'subsample':
0.8822806696529235}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:06,555] Trial 34 finished with value: 0.010429511704196781
and parameters: {'learning_rate': 0.48627193426243764, 'max_depth': 10,
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'n_estimators': 165, 'reg_lambda': 0.31509446487254494, 'subsample':
0.881895851418664}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:06,802] Trial 35 finished with value: 0.009744864772373872
and parameters: {'learning_rate': 0.47351124183734067, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.3021793355984897, 'subsample':
0.8817022930011381}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:07,033] Trial 36 finished with value: 0.011378388418655638
and parameters: {'learning_rate': 0.49028755381940015, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.30097915389494795, 'subsample':
0.8814659933746251}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:07,303] Trial 37 finished with value: 0.008894809953792047
and parameters: {'learning_rate': 0.4676066408823263, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.28744257447345434, 'subsample':
0.8807176116650002}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:07,530] Trial 38 finished with value: 0.00934434570105771
and parameters: {'learning_rate': 0.46784291959770835, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.28600636787140904, 'subsample':
0.8804209755316034}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:07,760] Trial 39 finished with value: 0.011316290244931493
and parameters: {'learning_rate': 0.4795886743096642, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.2806750565594027, 'subsample':
0.8805923364919913}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:07,974] Trial 40 finished with value: 0.009873885564409558
and parameters: {'learning_rate': 0.46841400713165876, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.27553914807424557, 'subsample':
0.8808731958160999}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:08,210] Trial 41 finished with value: 0.008998161604149645
and parameters: {'learning_rate': 0.46796622095680235, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2907802943842773, 'subsample':
0.8801983031810101}. Best is trial 28 with value: 0.00878925045460259.
[I 2024-08-30 19:42:08,456] Trial 42 finished with value: 0.008328478005854744
and parameters: {'learning_rate': 0.4674448120359901, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.2879702681562709, 'subsample':
0.8802669739713154}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:08,667] Trial 43 finished with value: 0.01057301560797373
and parameters: {'learning_rate': 0.4586454923158307, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.28894450129027294, 'subsample':
0.8800579744500708}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:08,877] Trial 44 finished with value: 0.010772864914302578
and parameters: {'learning_rate': 0.46401081919714465, 'max_depth': 10,
'n_estimators': 137, 'reg_lambda': 0.2960171336163083, 'subsample':
0.880973163328565}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:09,100] Trial 45 finished with value: 0.009816259595179781
and parameters: {'learning_rate': 0.47033097801219986, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2777961505960404, 'subsample':
0.8803478512912951}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:09,311] Trial 46 finished with value: 0.009189032309192487
and parameters: {'learning_rate': 0.47730522241414736, 'max_depth': 10,

'n_estimators': 142, 'reg_lambda': 0.2893342614612588, 'subsample':
0.8807394236982959}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:09,545] Trial 47 finished with value: 0.01013504807538403
and parameters: {'learning_rate': 0.4552064671815869, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2719947042475977, 'subsample':
0.881024322512854}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:09,758] Trial 48 finished with value: 0.009555538880709157
and parameters: {'learning_rate': 0.4652890881914251, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.28545486672801285, 'subsample':
0.8826162760313965}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:09,973] Trial 49 finished with value: 0.0104644618157948 and
parameters: {'learning_rate': 0.4487148626178843, 'max_depth': 10,
'n_estimators': 103, 'reg_lambda': 0.2945658111390657, 'subsample':
0.8802957569540851}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:10,196] Trial 50 finished with value: 0.01116096158579436
and parameters: {'learning_rate': 0.45791729889354493, 'max_depth': 10,
'n_estimators': 136, 'reg_lambda': 0.2903998746383975, 'subsample':
0.8812348802795108}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:10,429] Trial 51 finished with value: 0.01075452203224321
and parameters: {'learning_rate': 0.47825350041699194, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.28274926465224537, 'subsample':
0.8806705159380954}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:10,645] Trial 52 finished with value: 0.009986357883528 and
parameters: {'learning_rate': 0.4713757169983732, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.28855285934342323, 'subsample':
0.8800007893206607}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:10,863] Trial 53 finished with value: 0.008963821159439403
and parameters: {'learning_rate': 0.48230971823628843, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2979914796038134, 'subsample':
0.8806934410497433}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:11,086] Trial 54 finished with value: 0.009840831395305186
and parameters: {'learning_rate': 0.49170532433793734, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.29642685681028863, 'subsample':
0.8802797107607033}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:11,305] Trial 55 finished with value: 0.010375618718658776
and parameters: {'learning_rate': 0.4842369707171305, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2997413962788049, 'subsample':
0.880521830135018}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:11,543] Trial 56 finished with value: 0.010065471898484587
and parameters: {'learning_rate': 0.49895152513801, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2933552091413688, 'subsample':
0.8811783592459548}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:11,758] Trial 57 finished with value: 0.01042849601884268
and parameters: {'learning_rate': 0.4747276094203302, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.3058068262541145, 'subsample':
0.8815243523956303}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:11,954] Trial 58 finished with value: 0.009883541664016263
and parameters: {'learning_rate': 0.4941142869585786, 'max_depth': 10,

'n_estimators': 131, 'reg_lambda': 0.28390031767206997, 'subsample':
0.8819750260114169}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:12,192] Trial 59 finished with value: 0.010821067955983246
and parameters: {'learning_rate': 0.4826872500657823, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.27999538524727663, 'subsample':
0.8807576151567302}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:12,424] Trial 60 finished with value: 0.010283588041089475
and parameters: {'learning_rate': 0.4629085854396192, 'max_depth': 8,
'n_estimators': 145, 'reg_lambda': 0.26419421865521664, 'subsample':
0.8831079735979774}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:12,649] Trial 61 finished with value: 0.009944679285698296
and parameters: {'learning_rate': 0.4782492230065359, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.2907156733386179, 'subsample':
0.8807677578378748}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:12,870] Trial 62 finished with value: 0.010410977270316984
and parameters: {'learning_rate': 0.5284380986978484, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.29732113581108127, 'subsample':
0.8802286478444501}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:13,108] Trial 63 finished with value: 0.011238635980660243
and parameters: {'learning_rate': 0.4878663368661108, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.29108283468245394, 'subsample':
0.8805524107298843}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:13,652] Trial 64 finished with value: 0.009322838713640145
and parameters: {'learning_rate': 0.4709531117586889, 'max_depth': 10,
'n_estimators': 135, 'reg_lambda': 0.2879475485937962, 'subsample':
0.8839878848107561}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:14,550] Trial 65 finished with value: 0.010495343801911 53
and parameters: {'learning_rate': 0.4767722285241623, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.29910781445369766, 'subsample':
0.8810331230656472}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:15,283] Trial 66 finished with value: 0.009185887968765521
and parameters: {'learning_rate': 0.4496601957277253, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2840753660224679, 'subsample':
0.8843669695697888}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:16,199] Trial 67 finished with value: 0.010830272620085712
and parameters: {'learning_rate': 0.44961432704182996, 'max_depth': 9,
'n_estimators': 159, 'reg_lambda': 0.27778523983965986, 'subsample':
0.884811706152132}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:17,736] Trial 68 finished with value: 0.009222548649677477
and parameters: {'learning_rate': 0.45668512838523007, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2840734676566083, 'subsample':
0.8842079928106551}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:18,165] Trial 69 finished with value: 0.011599005651190696
and parameters: {'learning_rate': 0.44432886063451327, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.3124893259183645, 'subsample':
0.8853730093593201}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:18,396] Trial 70 finished with value: 0.010495100415893556
and parameters: {'learning_rate': 0.4367918434932147, 'max_depth': 9,

'n_estimators': 149, 'reg_lambda': 0.29404900987727867, 'subsample':
0.8837204001198603}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:18,619] Trial 71 finished with value: 0.009104127986218903
and parameters: {'learning_rate': 0.4664350832863123, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.28758548164312775, 'subsample':
0.8844058275031863}. Best is trial 42 with value: 0.008328478005854744.
[I 2024-08-30 19:42:18,859] Trial 72 finished with value: 0.007935691776980997
and parameters: {'learning_rate': 0.4657464653510161, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2875789049574918, 'subsample':
0.8845298031924}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:19,096] Trial 73 finished with value: 0.008276217168171804
and parameters: {'learning_rate': 0.4659169193901407, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2875963280745504, 'subsample':
0.8845311331071369}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:19,320] Trial 74 finished with value: 0.010022500159410294
and parameters: {'learning_rate': 0.4623395362849734, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.29211712223142106, 'subsample':
0.8849474673128225}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:19,539] Trial 75 finished with value: 0.009543887469993347
and parameters: {'learning_rate': 0.468871825161235, 'max_depth': 10,
'n_estimators': 169, 'reg_lambda': 0.28708125681220986, 'subsample':
0.8847422739648385}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:19,751] Trial 76 finished with value: 0.010282846912972847
and parameters: {'learning_rate': 0.4602430714142685, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.30668500767346496, 'subsample':
0.8833932166865195}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:19,994] Trial 77 finished with value: 0.009695122768686143
and parameters: {'learning_rate': 0.4729596462917461, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.28104834242575444, 'subsample':
0.8856051171834833}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:20,247] Trial 78 finished with value: 0.011111629958388467
and parameters: {'learning_rate': 0.46598448605107273, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2952134181949623, 'subsample':
0.884553733144939}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:20,458] Trial 79 finished with value: 0.009756150370189924
and parameters: {'learning_rate': 0.52300976202712, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.3032549898431166, 'subsample':
0.8824876205390727}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:20,681] Trial 80 finished with value: 0.009675637906735408
and parameters: {'learning_rate': 0.4816376209241393, 'max_depth': 10,
'n_estimators': 112, 'reg_lambda': 0.2922169236248726, 'subsample':
0.884088967819729}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:20,962] Trial 81 finished with value: 0.008469613773242396
and parameters: {'learning_rate': 0.4660427468608971, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.2853869469131014, 'subsample':
0.8845095080169324}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:21,215] Trial 82 finished with value: 0.011325141257113624
and parameters: {'learning_rate': 0.46402017953540786, 'max_depth': 10,

'n_estimators': 148, 'reg_lambda': 0.2860090924564782, 'subsample':
0.8851979707497375}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:21,436] Trial 83 finished with value: 0.010331457502691089
and parameters: {'learning_rate': 0.4694782342747557, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.28908029277242536, 'subsample':
0.8849809534611629}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:21,666] Trial 84 finished with value: 0.010285622490995775
and parameters: {'learning_rate': 0.45980334050596294, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.28521414439293263, 'subsample':
0.8845596893525786}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:21,912] Trial 85 finished with value: 0.011089964139487362
and parameters: {'learning_rate': 0.45557088947147495, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.27805412002545254, 'subsample':
0.8801822792085444}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:22,156] Trial 86 finished with value: 0.009920881143458862
and parameters: {'learning_rate': 0.47282936356016925, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.2824644416160547, 'subsample':
0.8804432736394172}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:22,401] Trial 87 finished with value: 0.010564977518684291
and parameters: {'learning_rate': 0.46499937265398616, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.32724318398902896, 'subsample':
0.8839665487148287}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:22,677] Trial 88 finished with value: 0.011284293964996412
and parameters: {'learning_rate': 0.4753334922623411, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2728472697497811, 'subsample':
0.8842682914931029}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:22,920] Trial 89 finished with value: 0.010143731502984027
and parameters: {'learning_rate': 0.46775397423744425, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.2906365549141935, 'subsample':
0.8857533200306293}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:23,141] Trial 90 finished with value: 0.00992775392232858
and parameters: {'learning_rate': 0.46159456920998626, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2793849510519414, 'subsample':
0.8848444242843744}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:23,387] Trial 91 finished with value: 0.009617598148276668
and parameters: {'learning_rate': 0.4664157231832184, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2873146130272842, 'subsample':
0.8843347364523931}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:23,604] Trial 92 finished with value: 0.010670746328456335
and parameters: {'learning_rate': 0.4721158050822688, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2887289775735362, 'subsample':
0.8845675076386291}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:23,835] Trial 93 finished with value: 0.00959552874165677
and parameters: {'learning_rate': 0.4584071260048289, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2870724109235308, 'subsample':
0.8844352059467588}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:24,076] Trial 94 finished with value: 0.010862879755503499
and parameters: {'learning_rate': 0.46981201996401134, 'max_depth': 10,

'n_estimators': 144, 'reg_lambda': 0.2973574507505549, 'subsample':
0.8837332459959194}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:24,297] Trial 95 finished with value: 0.011638893464331833
and parameters: {'learning_rate': 0.4794343216037582, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3178538145017849, 'subsample':
0.8846783014021077}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:24,517] Trial 96 finished with value: 0.009792824353150605
and parameters: {'learning_rate': 0.4667880562677937, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.3009517770164797, 'subsample':
0.8831432336716623}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:24,754] Trial 97 finished with value: 0.012300929780274495
and parameters: {'learning_rate': 0.4531787749045031, 'max_depth': 8,
'n_estimators': 159, 'reg_lambda': 0.283258210787814, 'subsample':
0.8851070073254939}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:24,997] Trial 98 finished with value: 0.010782056647334148
and parameters: {'learning_rate': 0.4630851133147899, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.2936889907386548, 'subsample':
0.8803821870353373}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:25,239] Trial 99 finished with value: 0.009520828365665293
and parameters: {'learning_rate': 0.48334450215427033, 'max_depth': 10,
'n_estimators': 137, 'reg_lambda': 0.28971807739537875, 'subsample':
0.8841146018201008}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:25,466] Trial 100 finished with value: 0.009704960719490365
and parameters: {'learning_rate': 0.47608643827761593, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.29161788727722576, 'subsample':
0.8827019821652652}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:25,686] Trial 101 finished with value: 0.010542261015926325
and parameters: {'learning_rate': 0.4422570372251025, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2853290116602832, 'subsample':
0.8843853083227772}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:25,906] Trial 102 finished with value: 0.009593251681135189
and parameters: {'learning_rate': 0.4873512460198265, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.3113486524446099, 'subsample':
0.8801109263200346}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:26,160] Trial 103 finished with value: 0.010059479559563324
and parameters: {'learning_rate': 0.4499204192152094, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.28426747484650533, 'subsample':
0.8846719413238681}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:26,396] Trial 104 finished with value: 0.009183075368328745
and parameters: {'learning_rate': 0.4475687019164447, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.2817451910145314, 'subsample':
0.8844608640183292}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:26,615] Trial 105 finished with value: 0.009951670222230537
and parameters: {'learning_rate': 0.47112092817444134, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28127880375861025, 'subsample':
0.8844790622446504}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:26,843] Trial 106 finished with value: 0.010065042866097714
and parameters: {'learning_rate': 0.43306885349921664, 'max_depth': 10,

'n_estimators': 155, 'reg_lambda': 0.2955150944993989, 'subsample':
0.880909825794266}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:27,088] Trial 107 finished with value: 0.01122767731197716
and parameters: {'learning_rate': 0.46108942927451774, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2750104339196723, 'subsample':
0.8841879865295721}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:27,339] Trial 108 finished with value: 0.009574983077448857
and parameters: {'learning_rate': 0.465262904443044, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.28729438241636523, 'subsample':
0.8838435456749786}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:27,548] Trial 109 finished with value: 0.009975346042828683
and parameters: {'learning_rate': 0.4472918768583986, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.2817180194834367, 'subsample':
0.8834860346963354}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:27,778] Trial 110 finished with value: 0.011425525395093209
and parameters: {'learning_rate': 0.4550867642968066, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.28531841787625, 'subsample':
0.8806336180406807}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:28,017] Trial 111 finished with value: 0.010548409865626862
and parameters: {'learning_rate': 0.45194974816812694, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.28415445346783225, 'subsample':
0.884826922588698}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:28,542] Trial 112 finished with value: 0.009212711562283173
and parameters: {'learning_rate': 0.43947029784421465, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2880849519925127, 'subsample':
0.8843719527409853}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:29,513] Trial 113 finished with value: 0.0110641113351346
and parameters: {'learning_rate': 0.4849611820762582, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.29020109237500513, 'subsample':
0.8849265942292827}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:30,827] Trial 114 finished with value: 0.010669956958729201
and parameters: {'learning_rate': 0.4472304180900425, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28649766111196734, 'subsample':
0.884580110976631}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:31,549] Trial 115 finished with value: 0.010663993665154343
and parameters: {'learning_rate': 0.4571843242557955, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.2799541501964669, 'subsample':
0.8847338955198698}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:32,867] Trial 116 finished with value: 0.010256387449340695
and parameters: {'learning_rate': 0.4689066012111405, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.2834781189158526, 'subsample':
0.885259657760514}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:33,086] Trial 117 finished with value: 0.010453233548031156
and parameters: {'learning_rate': 0.49026256949804464, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.2928670576575963, 'subsample':
0.8819991742045001}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:33,335] Trial 118 finished with value: 0.009295878979355863
and parameters: {'learning_rate': 0.463975516704883, 'max_depth': 10,

'n_estimators': 150, 'reg_lambda': 0.2787260253085395, 'subsample':
0.8842684295852157}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:33,584] Trial 119 finished with value: 0.010456730848773495
and parameters: {'learning_rate': 0.47474254295234153, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.27654393863940135, 'subsample':
0.8801251147567682}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:33,863] Trial 120 finished with value: 0.010720380115062484
and parameters: {'learning_rate': 0.46771775547354877, 'max_depth': 9,
'n_estimators': 147, 'reg_lambda': 0.2824067906865496, 'subsample':
0.8839991308980015}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:34,088] Trial 121 finished with value: 0.009453315278895185
and parameters: {'learning_rate': 0.4779387042876805, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.28867811451691766, 'subsample':
0.8808485409088894}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:34,316] Trial 122 finished with value: 0.011171384692268393
and parameters: {'learning_rate': 0.4594828401467339, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.2891880227195731, 'subsample':
0.8811618038110597}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:34,556] Trial 123 finished with value: 0.011973406599068667
and parameters: {'learning_rate': 0.4817430310359178, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.2902267161182404, 'subsample':
0.8806959316103803}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:34,778] Trial 124 finished with value: 0.010881395690100775
and parameters: {'learning_rate': 0.4732837565669142, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2917505543674504, 'subsample':
0.8804958975721735}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:34,992] Trial 125 finished with value: 0.010383018404907785
and parameters: {'learning_rate': 0.4771434222018806, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28508640676834984, 'subsample':
0.8802790676869348}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:35,211] Trial 126 finished with value: 0.011135598515585642
and parameters: {'learning_rate': 0.47072082663372766, 'max_depth': 10,
'n_estimators': 137, 'reg_lambda': 0.28628477665867447, 'subsample':
0.8800071111539883}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:35,459] Trial 127 finished with value: 0.009886163820153167
and parameters: {'learning_rate': 0.4664123673104145, 'max_depth': 10,
'n_estimators': 134, 'reg_lambda': 0.28785680809288544, 'subsample':
0.8813872532631347}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:35,684] Trial 128 finished with value: 0.012278263548086945
and parameters: {'learning_rate': 0.4632769240390519, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.3168854621052888, 'subsample':
0.8803903494035196}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:35,904] Trial 129 finished with value: 0.009485612418500232
and parameters: {'learning_rate': 0.4614112353181924, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.28256650426510477, 'subsample':
0.8810875088826989}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:36,121] Trial 130 finished with value: 0.009171094089101063
and parameters: {'learning_rate': 0.47987469496013435, 'max_depth': 10,

'n_estimators': 147, 'reg_lambda': 0.32316173377114016, 'subsample':
0.885079048775382}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:36,366] Trial 131 finished with value: 0.008967157431558941
and parameters: {'learning_rate': 0.47912031090939605, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3231750653428933, 'subsample':
0.885091203415955}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:36,611] Trial 132 finished with value: 0.011009051314093455
and parameters: {'learning_rate': 0.4806099087495756, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.3257082594607123, 'subsample':
0.8854166780423902}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:36,832] Trial 133 finished with value: 0.011376653570849802
and parameters: {'learning_rate': 0.4864814454787619, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.3208206728037434, 'subsample':
0.8850572796298785}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:37,049] Trial 134 finished with value: 0.011508034994557777
and parameters: {'learning_rate': 0.4839027169302932, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.32312720528004824, 'subsample':
0.8848069314997219}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:37,270] Trial 135 finished with value: 0.010671264521115826
and parameters: {'learning_rate': 0.4933785987065637, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.32777882180924983, 'subsample':
0.8849677414005865}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:37,514] Trial 136 finished with value: 0.010373582031178814
and parameters: {'learning_rate': 0.4788679390378947, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.32424401163303723, 'subsample':
0.8851430458645375}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:37,744] Trial 137 finished with value: 0.01011586741871313
and parameters: {'learning_rate': 0.468955023728849, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.32398749072051947, 'subsample':
0.8844745329932958}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:37,956] Trial 138 finished with value: 0.010390501017101823
and parameters: {'learning_rate': 0.472116015433501, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3220657613657772, 'subsample':
0.8853281627519288}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:38,177] Trial 139 finished with value: 0.010598955593437676
and parameters: {'learning_rate': 0.4511601448648042, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.32912375686361367, 'subsample':
0.8855233011667475}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:38,404] Trial 140 finished with value: 0.010783176391315579
and parameters: {'learning_rate': 0.4742760400356868, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.31920351378245937, 'subsample':
0.8847398560936316}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:38,638] Trial 141 finished with value: 0.009970450958252384
and parameters: {'learning_rate': 0.4794373942188214, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.28646613389745135, 'subsample':
0.8846378208525236}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:38,848] Trial 142 finished with value: 0.009679374749319384
and parameters: {'learning_rate': 0.47681242035348603, 'max_depth': 10,

'n_estimators': 146, 'reg_lambda': 0.29394498769772204, 'subsample':
0.8841792975027798}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:39,057] Trial 143 finished with value: 0.010165942055654012
and parameters: {'learning_rate': 0.48118172268604786, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.28462437394248896, 'subsample':
0.8816134505834456}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:39,287] Trial 144 finished with value: 0.010249326842020727
and parameters: {'learning_rate': 0.46518229932091765, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.31527919663411186, 'subsample':
0.8843184298006196}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:39,506] Trial 145 finished with value: 0.010059124385329198
and parameters: {'learning_rate': 0.46755873680285565, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.28993297837867393, 'subsample':
0.8829616885360991}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:39,731] Trial 146 finished with value: 0.010182438685657727
and parameters: {'learning_rate': 0.48277999756352846, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.32546139289860954, 'subsample':
0.8807744471940542}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:39,935] Trial 147 finished with value: 0.009071044329533168
and parameters: {'learning_rate': 0.5051206045579334, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.32677811874635215, 'subsample':
0.8805722973832975}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:40,162] Trial 148 finished with value: 0.010811583484265164
and parameters: {'learning_rate': 0.4889338820915349, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3264279440588327, 'subsample':
0.8805685743355867}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:40,398] Trial 149 finished with value: 0.01066118143897497
and parameters: {'learning_rate': 0.44157215955292367, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.3298714873073307, 'subsample':
0.8844993292152803}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:40,627] Trial 150 finished with value: 0.009531159274154 26
and parameters: {'learning_rate': 0.5129282147030031, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.3230088631198738, 'subsample':
0.8849157891912639}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:40,837] Trial 151 finished with value: 0.009845162543530064
and parameters: {'learning_rate': 0.5152861004860081, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.3270033479990625, 'subsample':
0.8804024412963054}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:41,051] Trial 152 finished with value: 0.01085383100286182
and parameters: {'learning_rate': 0.5051543279351671, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.3280710370998163, 'subsample':
0.8801973250837695}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:41,269] Trial 153 finished with value: 0.010121471664072079
and parameters: {'learning_rate': 0.5179550884449546, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2877704154930564, 'subsample':
0.8806395528913239}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:41,481] Trial 154 finished with value: 0.010639043611485585
and parameters: {'learning_rate': 0.4705492914074809, 'max_depth': 10,

'n_estimators': 141, 'reg_lambda': 0.3084758151735961, 'subsample':
0.8808445558610071}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:41,724] Trial 155 finished with value: 0.01070299522474565
and parameters: {'learning_rate': 0.464782320918274, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.29129187624609537, 'subsample':
0.885203396843805}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:41,952] Trial 156 finished with value: 0.010106310995087117
and parameters: {'learning_rate': 0.4440665244102247, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2860753024158045, 'subsample':
0.8850309223522914}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:42,202] Trial 157 finished with value: 0.009736733998976111
and parameters: {'learning_rate': 0.4621454073470816, 'max_depth': 8,
'n_estimators': 138, 'reg_lambda': 0.28914115767388965, 'subsample':
0.8845835501078718}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:42,446] Trial 158 finished with value: 0.00999601796033113
and parameters: {'learning_rate': 0.5014607853880322, 'max_depth': 10,
'n_estimators': 125, 'reg_lambda': 0.3212410675754777, 'subsample':
0.8804888044138615}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:42,677] Trial 159 finished with value: 0.009574320821541266
and parameters: {'learning_rate': 0.4964977028640315, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.3063592876463798, 'subsample':
0.8844589447764647}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:43,262] Trial 160 finished with value: 0.011632007240870563
and parameters: {'learning_rate': 0.44685215060218725, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.28368001626087125, 'subsample':
0.8802923188706852}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:44,236] Trial 161 finished with value: 0.01049279383661194
and parameters: {'learning_rate': 0.434271909144747, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2879086058992234, 'subsample':
0.8844007196866003}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:46,480] Trial 162 finished with value: 0.010084845624825216
and parameters: {'learning_rate': 0.46703861455548623, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.2883744473026303, 'subsample':
0.8843023264018721}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:47,336] Trial 163 finished with value: 0.01056470419595632
and parameters: {'learning_rate': 0.4755879265983843, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.29233226507305456, 'subsample':
0.8847060692303371}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:48,155] Trial 164 finished with value: 0.010443004791804957
and parameters: {'learning_rate': 0.4384794359441659, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.28712146392226295, 'subsample':
0.8848390767750512}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:48,978] Trial 165 finished with value: 0.010846842040747545
and parameters: {'learning_rate': 0.4694304137391083, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.2807938392565547, 'subsample':
0.8840682557536006}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:49,700] Trial 166 finished with value: 0.011486047828708169
and parameters: {'learning_rate': 0.458699366398872, 'max_depth': 10,

'n_estimators': 143, 'reg_lambda': 0.2906063230382033, 'subsample':
0.8821545368402928}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:50,952] Trial 167 finished with value: 0.008529351804728986
and parameters: {'learning_rate': 0.4549228027426308, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2851298147570965, 'subsample':
0.8844004957814023}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:51,215] Trial 168 finished with value: 0.009866022786248018
and parameters: {'learning_rate': 0.4550668898314432, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.28524828885214376, 'subsample':
0.8838708323637349}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:51,477] Trial 169 finished with value: 0.010152739452804411
and parameters: {'learning_rate': 0.4541726449795693, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.3284121394465321, 'subsample':
0.8809263457666522}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:51,711] Trial 170 finished with value: 0.009625499794325166
and parameters: {'learning_rate': 0.4506185040456773, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2820385008892579, 'subsample':
0.8842347737560036}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:51,945] Trial 171 finished with value: 0.009973587164330224
and parameters: {'learning_rate': 0.44601157139897685, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.28415108631311053, 'subsample':
0.8844050317926396}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:52,175] Trial 172 finished with value: 0.010067884119849907
and parameters: {'learning_rate': 0.43779467597038135, 'max_depth': 10,
'n_estimators': 170, 'reg_lambda': 0.28927792872029595, 'subsample':
0.8846308617621912}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:52,421] Trial 173 finished with value: 0.009220982359883794
and parameters: {'learning_rate': 0.4638711509200947, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2858969004574489, 'subsample':
0.8843228002667446}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:52,639] Trial 174 finished with value: 0.010366717174269466
and parameters: {'learning_rate': 0.4490399034563199, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.28848221700381665, 'subsample':
0.884139582647998}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:52,917] Trial 175 finished with value: 0.009212420896377537
and parameters: {'learning_rate': 0.46026903725068874, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2868184398125142, 'subsample':
0.8844145025620075}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:53,147] Trial 176 finished with value: 0.009811109235805358
and parameters: {'learning_rate': 0.46007015743889224, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2867818303453626, 'subsample':
0.8845685728725375}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:53,422] Trial 177 finished with value: 0.009482516673022537
and parameters: {'learning_rate': 0.4573458935571978, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.29900353787581374, 'subsample':
0.8848249629442789}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:53,656] Trial 178 finished with value: 0.008906868690833713
and parameters: {'learning_rate': 0.46487775809763354, 'max_depth': 9,

'n_estimators': 151, 'reg_lambda': 0.28460211662679513, 'subsample':
0.8807243071540074}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:53,890] Trial 179 finished with value: 0.010345641646128403
and parameters: {'learning_rate': 0.46625740173126473, 'max_depth': 9,
'n_estimators': 152, 'reg_lambda': 0.28314290658854463, 'subsample':
0.8805838247349613}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:54,132] Trial 180 finished with value: 0.009665159715906308
and parameters: {'learning_rate': 0.46308822252674964, 'max_depth': 9,
'n_estimators': 155, 'reg_lambda': 0.3249676920751948, 'subsample':
0.8804669489425856}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:54,393] Trial 181 finished with value: 0.009585988837781743
and parameters: {'learning_rate': 0.46057045669496116, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.28517876844783635, 'subsample':
0.8808265666820089}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:54,634] Trial 182 finished with value: 0.009947661906416699
and parameters: {'learning_rate': 0.4660242116224619, 'max_depth': 8,
'n_estimators': 151, 'reg_lambda': 0.2865718975588134, 'subsample':
0.8807120278218682}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:54,861] Trial 183 finished with value: 0.010738054884330628
and parameters: {'learning_rate': 0.4642468804483832, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.2844357576438263, 'subsample':
0.8844524435179588}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:55,085] Trial 184 finished with value: 0.011030050136899745
and parameters: {'learning_rate': 0.46798990816123426, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.2822415922499186, 'subsample':
0.8824223746631776}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:55,350] Trial 185 finished with value: 0.009580068334861717
and parameters: {'learning_rate': 0.45307510806138357, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2901195162437984, 'subsample':
0.8810022954352082}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:55,563] Trial 186 finished with value: 0.009427214785606347
and parameters: {'learning_rate': 0.46213541359888494, 'max_depth': 9,
'n_estimators': 145, 'reg_lambda': 0.3041752381608108, 'subsample':
0.8801903728012913}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:55,790] Trial 187 finished with value: 0.010622328146139476
and parameters: {'learning_rate': 0.45678973287733504, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.31027675274388067, 'subsample':
0.8828249922212744}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:56,011] Trial 188 finished with value: 0.010905713005265426
and parameters: {'learning_rate': 0.47199420629677297, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.2799424575015157, 'subsample':
0.8803344472938669}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:56,244] Trial 189 finished with value: 0.009699389713763412
and parameters: {'learning_rate': 0.46837847095263796, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.2872314624823255, 'subsample':
0.8846965252923775}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:56,496] Trial 190 finished with value: 0.0108472755818437
and parameters: {'learning_rate': 0.46543838673153415, 'max_depth': 10,

'n_estimators': 142, 'reg_lambda': 0.28332181995952976, 'subsample':
0.8807138623237936}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:56,726] Trial 191 finished with value: 0.009874713718582267
and parameters: {'learning_rate': 0.4698771566471456, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.287779784842132, 'subsample':
0.8843567356973773}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:56,956] Trial 192 finished with value: 0.011413539529802204
and parameters: {'learning_rate': 0.46308517074666605, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2669827304500718, 'subsample':
0.8845323781889536}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:57,203] Trial 193 finished with value: 0.01041824499091849
and parameters: {'learning_rate': 0.4302246366100408, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.30074723409995735, 'subsample':
0.8831273874721461}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:57,460] Trial 194 finished with value: 0.012054433685196387
and parameters: {'learning_rate': 0.4855307854745773, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28564744688419874, 'subsample':
0.8851539404886646}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:57,672] Trial 195 finished with value: 0.009063419892077668
and parameters: {'learning_rate': 0.4801641857479479, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2877153110655053, 'subsample':
0.8842777201460006}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:57,906] Trial 196 finished with value: 0.010889226928445676
and parameters: {'learning_rate': 0.4810754050779136, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.28896598301111087, 'subsample':
0.8842147198107938}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:58,124] Trial 197 finished with value: 0.011595841820483177
and parameters: {'learning_rate': 0.4788700940559005, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.29132806034289593, 'subsample':
0.8849929538985255}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:58,342] Trial 198 finished with value: 0.01001481560548975
and parameters: {'learning_rate': 0.4847725329043227, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2844597684318835, 'subsample':
0.8839755967871622}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:58,579] Trial 199 finished with value: 0.011086157321366093
and parameters: {'learning_rate': 0.4772873129930073, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2865083378716029, 'subsample':
0.8832559680361031}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:58,822] Trial 200 finished with value: 0.011273635733251526
and parameters: {'learning_rate': 0.48212493669605233, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.3265293086602112, 'subsample':
0.8836075259270469}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:42:59,084] Trial 201 finished with value: 0.010800609122418968
and parameters: {'learning_rate': 0.4671409756124303, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2879200300406385, 'subsample':
0.8844658297769159}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:00,217] Trial 202 finished with value: 0.010431554198786 and
parameters: {'learning_rate': 0.4589018892879516, 'max_depth': 10,

'n_estimators': 150, 'reg_lambda': 0.28986540654091975, 'subsample':
0.8842846182692037}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:01,103] Trial 203 finished with value: 0.009447984766355822
and parameters: {'learning_rate': 0.44057622981833666, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2881905820627096, 'subsample':
0.8843733892515502}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:01,924] Trial 204 finished with value: 0.011261190095083381
and parameters: {'learning_rate': 0.4741605332033186, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2851354959579775, 'subsample':
0.8845599515778143}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:02,478] Trial 205 finished with value: 0.011159439460263283
and parameters: {'learning_rate': 0.4657406176240142, 'max_depth': 10,
'n_estimators': 112, 'reg_lambda': 0.28615250975608264, 'subsample':
0.8841091754678342}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:03,090] Trial 206 finished with value: 0.01066780225867266
and parameters: {'learning_rate': 0.4432053269736288, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.32998585034755556, 'subsample':
0.8846661873687021}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:03,551] Trial 207 finished with value: 0.010943773971027148
and parameters: {'learning_rate': 0.46119691061102586, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.29297737577876987, 'subsample':
0.8844376522259378}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:03,815] Trial 208 finished with value: 0.011131857833793397
and parameters: {'learning_rate': 0.479429532595881, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.28976086386326283, 'subsample':
0.8805916291943949}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:04,056] Trial 209 finished with value: 0.010999164415316717
and parameters: {'learning_rate': 0.4709428455571582, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.2968631989141147, 'subsample':
0.8847897681777637}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:04,303] Trial 210 finished with value: 0.009841465230670 59
and parameters: {'learning_rate': 0.46413187933776295, 'max_depth': 8,
'n_estimators': 144, 'reg_lambda': 0.2875001724523075, 'subsample':
0.8853303970202285}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:04,539] Trial 211 finished with value: 0.009782414274939 75
and parameters: {'learning_rate': 0.4646256642715671, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2860442716203906, 'subsample':
0.8844267400762171}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:04,803] Trial 212 finished with value: 0.010115173056147059
and parameters: {'learning_rate': 0.4632357047893707, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2837318016046827, 'subsample':
0.8842732915485231}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:05,063] Trial 213 finished with value: 0.010229352220677019
and parameters: {'learning_rate': 0.4693828939902386, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2853970702296279, 'subsample':
0.8843350180670045}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:05,299] Trial 214 finished with value: 0.009733154896566 61
and parameters: {'learning_rate': 0.4671795873119971, 'max_depth': 10,

'n_estimators': 151, 'reg_lambda': 0.2888583810313926, 'subsample':
0.884564316635386}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:05,523] Trial 215 finished with value: 0.010104615950015598
and parameters: {'learning_rate': 0.4607327080143225, 'max_depth': 10,
'n_estimators': 100, 'reg_lambda': 0.2874986005361383, 'subsample':
0.8841768246377806}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:05,792] Trial 216 finished with value: 0.009139528685839471
and parameters: {'learning_rate': 0.46477920641270454, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2819697935559977, 'subsample':
0.88433620849023}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:06,025] Trial 217 finished with value: 0.011349158809921366
and parameters: {'learning_rate': 0.4829385573628823, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2810177878782521, 'subsample':
0.8846143322229072}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:06,285] Trial 218 finished with value: 0.009665522184211994
and parameters: {'learning_rate': 0.4519672224066428, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28302509069283416, 'subsample':
0.8849341067210581}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:06,554] Trial 219 finished with value: 0.009990415363882963
and parameters: {'learning_rate': 0.4676461786290984, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.28219847433721773, 'subsample':
0.8844938675693986}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:06,825] Trial 220 finished with value: 0.010659793736407668
and parameters: {'learning_rate': 0.43362403708506003, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2950550803707323, 'subsample':
0.8807094589536837}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:07,080] Trial 221 finished with value: 0.009544679158659636
and parameters: {'learning_rate': 0.46435056577690914, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2843603505662468, 'subsample':
0.8842885722107513}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:07,316] Trial 222 finished with value: 0.010287998195069249
and parameters: {'learning_rate': 0.5078634648731263, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.2867408079839411, 'subsample':
0.8843674328909513}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:07,556] Trial 223 finished with value: 0.010318786231038518
and parameters: {'learning_rate': 0.46256125577156615, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2853851553202172, 'subsample':
0.8844068717145909}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:07,795] Trial 224 finished with value: 0.009950542048722182
and parameters: {'learning_rate': 0.46479929346119675, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.29066875519806123, 'subsample':
0.8841551885120538}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:08,051] Trial 225 finished with value: 0.008799004155832566
and parameters: {'learning_rate': 0.46694846074029855, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.2867613207251978, 'subsample':
0.8804874393613924}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:08,285] Trial 226 finished with value: 0.008997316712624954
and parameters: {'learning_rate': 0.46866129603509443, 'max_depth': 10,

'n_estimators': 166, 'reg_lambda': 0.28824839030918165, 'subsample':
0.8803731132731661}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:08,525] Trial 227 finished with value: 0.00935893186654957
and parameters: {'learning_rate': 0.5255245766368235, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.28849846242563076, 'subsample':
0.8804289506248449}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:08,767] Trial 228 finished with value: 0.011174536931889675
and parameters: {'learning_rate': 0.46852451954814023, 'max_depth': 9,
'n_estimators': 166, 'reg_lambda': 0.3224027996554778, 'subsample':
0.8801284439322977}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:09,024] Trial 229 finished with value: 0.010063729773349671
and parameters: {'learning_rate': 0.46613040912326054, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.2867324776888618, 'subsample':
0.880311624942183}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:09,259] Trial 230 finished with value: 0.011408982732114515
and parameters: {'learning_rate': 0.4483773866742281, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.2817019502719972, 'subsample':
0.8806135915980771}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:09,489] Trial 231 finished with value: 0.01000963753814248
and parameters: {'learning_rate': 0.4708928922054957, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28908016164502187, 'subsample':
0.8804898332501627}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:09,712] Trial 232 finished with value: 0.00989157867729131
and parameters: {'learning_rate': 0.4671363963105827, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.32824582876055325, 'subsample':
0.8803132220560425}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:09,959] Trial 233 finished with value: 0.010552347084794807
and parameters: {'learning_rate': 0.46939075726585294, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.28730948387505034, 'subsample':
0.8800039582731829}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:10,190] Trial 234 finished with value: 0.00941479946512714
and parameters: {'learning_rate': 0.4763309562370118, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.28969965442563494, 'subsample':
0.8804418187285287}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:10,418] Trial 235 finished with value: 0.009865620914477008
and parameters: {'learning_rate': 0.4654206754899018, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.291306581911773, 'subsample':
0.8805337771967108}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:10,653] Trial 236 finished with value: 0.009630317030487081
and parameters: {'learning_rate': 0.4799955004011874, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.2847525389018862, 'subsample':
0.8807955491531791}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:10,875] Trial 237 finished with value: 0.00837395708392496
and parameters: {'learning_rate': 0.4679552705533617, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.28825412695153996, 'subsample':
0.8806481653302722}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:11,126] Trial 238 finished with value: 0.010868902836645853
and parameters: {'learning_rate': 0.47323458399377133, 'max_depth': 10,

'n_estimators': 137, 'reg_lambda': 0.3136747651019394, 'subsample':
0.8806614937432622}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:11,392] Trial 239 finished with value: 0.011186981093461812
and parameters: {'learning_rate': 0.4686617016624375, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.27924840591555333, 'subsample':
0.8809357757230692}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:11,618] Trial 240 finished with value: 0.01023997742354728
and parameters: {'learning_rate': 0.46693531781433095, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.32468626092492253, 'subsample':
0.8802041671077947}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:11,860] Trial 241 finished with value: 0.009586664276162836
and parameters: {'learning_rate': 0.46612314674767696, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.2881862191878033, 'subsample':
0.8825772466559485}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:12,123] Trial 242 finished with value: 0.01107956276818417
and parameters: {'learning_rate': 0.46192614389492836, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.2867250687638493, 'subsample':
0.8850934450552624}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:12,356] Trial 243 finished with value: 0.00976425033480102
and parameters: {'learning_rate': 0.4712748801386628, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.28871506164206184, 'subsample':
0.8817525623841964}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:12,607] Trial 244 finished with value: 0.009999871011406689
and parameters: {'learning_rate': 0.4686643037490101, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.28357102786666233, 'subsample':
0.8807474971156434}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:12,841] Trial 245 finished with value: 0.011362687338593394
and parameters: {'learning_rate': 0.47773376523465216, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.28786248328172886, 'subsample':
0.880598785261863}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:13,125] Trial 246 finished with value: 0.010651527759004836
and parameters: {'learning_rate': 0.46398796647241136, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.28570650824854443, 'subsample':
0.8804756290369113}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:13,370] Trial 247 finished with value: 0.0106953834787848
and parameters: {'learning_rate': 0.4657714729758522, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.28644096603489355, 'subsample':
0.8803365028831213}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:14,006] Trial 248 finished with value: 0.010306225835032642
and parameters: {'learning_rate': 0.4807215960332044, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2897632555612625, 'subsample':
0.8845453483261383}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:14,905] Trial 249 finished with value: 0.010838683575051562
and parameters: {'learning_rate': 0.46748375124327934, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.3195241042710946, 'subsample':
0.8808783243575578}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:16,142] Trial 250 finished with value: 0.010126769495173004
and parameters: {'learning_rate': 0.45557436727426326, 'max_depth': 10,

'n_estimators': 150, 'reg_lambda': 0.29132295736396, 'subsample':
0.8847268654321656}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:16,878] Trial 251 finished with value: 0.010624370232454166
and parameters: {'learning_rate': 0.45907650564029595, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.2848028662144445, 'subsample':
0.8852146971473981}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:18,186] Trial 252 finished with value: 0.010727116320158148
and parameters: {'learning_rate': 0.4834174404133973, 'max_depth': 10,
'n_estimators': 135, 'reg_lambda': 0.3171678662417802, 'subsample':
0.8805687739168634}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:18,434] Trial 253 finished with value: 0.009166650228512156
and parameters: {'learning_rate': 0.46220987708270295, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.3021261424388491, 'subsample':
0.8845200021333031}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:18,682] Trial 254 finished with value: 0.009630423327938516
and parameters: {'learning_rate': 0.46146554819661095, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.30031772679208796, 'subsample':
0.8846511608963641}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:18,909] Trial 255 finished with value: 0.01137202888342295
and parameters: {'learning_rate': 0.4628839517436784, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.29794424400472674, 'subsample':
0.8845121063125332}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:19,144] Trial 256 finished with value: 0.009933328030654692
and parameters: {'learning_rate': 0.4648866286255996, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.3268389134836504, 'subsample':
0.8801988360862}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:19,401] Trial 257 finished with value: 0.011991099548757767
and parameters: {'learning_rate': 0.47055825054713235, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2831103457313159, 'subsample':
0.8807280622199615}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:19,654] Trial 258 finished with value: 0.010466136207807723
and parameters: {'learning_rate': 0.44518271440409335, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.3036370896088581, 'subsample':
0.884886170204779}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:19,876] Trial 259 finished with value: 0.010135799657734975
and parameters: {'learning_rate': 0.4605158262869555, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.2863463748435886, 'subsample':
0.880388934286159}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:20,122] Trial 260 finished with value: 0.010073156151938349
and parameters: {'learning_rate': 0.4631674836751594, 'max_depth': 8,
'n_estimators': 162, 'reg_lambda': 0.2813901222413076, 'subsample':
0.8857276538770085}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:20,386] Trial 261 finished with value: 0.010713877928204047
and parameters: {'learning_rate': 0.45014833367820034, 'max_depth': 10,
'n_estimators': 138, 'reg_lambda': 0.30273418554317016, 'subsample':
0.8842472960279334}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:20,613] Trial 262 finished with value: 0.01095117713607257
and parameters: {'learning_rate': 0.520184982815815, 'max_depth': 10,

'n_estimators': 165, 'reg_lambda': 0.3021818209224027, 'subsample':
0.8811046656143245}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:20,851] Trial 263 finished with value: 0.010399314999321625
and parameters: {'learning_rate': 0.47250228246679843, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2846251401170936, 'subsample':
0.8844683582735472}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:21,097] Trial 264 finished with value: 0.011147028592867458
and parameters: {'learning_rate': 0.4683449790673938, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2875760410680062, 'subsample':
0.8840569671909605}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:21,338] Trial 265 finished with value: 0.01014450912961943
and parameters: {'learning_rate': 0.465921283384825, 'max_depth': 9,
'n_estimators': 149, 'reg_lambda': 0.29874430676822056, 'subsample':
0.8846480289717112}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:21,583] Trial 266 finished with value: 0.010111432510064548
and parameters: {'learning_rate': 0.45709974682892207, 'max_depth': 10,
'n_estimators': 118, 'reg_lambda': 0.3060073069414567, 'subsample':
0.8850751051801001}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:21,815] Trial 267 finished with value: 0.01200736432672692
and parameters: {'learning_rate': 0.5003389638765672, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2924840972962249, 'subsample':
0.8843761091488297}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:22,045] Trial 268 finished with value: 0.009716196481204134
and parameters: {'learning_rate': 0.47508756515998357, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2897619742215768, 'subsample':
0.8806629537933761}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:22,282] Trial 269 finished with value: 0.011323101759795406
and parameters: {'learning_rate': 0.4691831206967101, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.3257285473461854, 'subsample':
0.8847724867458945}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:22,540] Trial 270 finished with value: 0.010588028176056393
and parameters: {'learning_rate': 0.4642145216252487, 'max_depth': 10,
'n_estimators': 142, 'reg_lambda': 0.28348366792379104, 'subsample':
0.8801059064831582}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:22,768] Trial 271 finished with value: 0.010843562526322396
and parameters: {'learning_rate': 0.47882322712911835, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.2858803961274511, 'subsample':
0.8804997014776889}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:23,073] Trial 272 finished with value: 0.01090953941613436
and parameters: {'learning_rate': 0.4670088478143881, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.28765721926757365, 'subsample':
0.8845175663333745}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:23,295] Trial 273 finished with value: 0.009747476432650273
and parameters: {'learning_rate': 0.48130390657613853, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.3285333485767107, 'subsample':
0.8808402196608847}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:23,548] Trial 274 finished with value: 0.010151417244874728
and parameters: {'learning_rate': 0.46205658858904575, 'max_depth': 10,

'n_estimators': 132, 'reg_lambda': 0.30789160468892723, 'subsample':
0.8854510379275757}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:23,776] Trial 275 finished with value: 0.010247404977030508
and parameters: {'learning_rate': 0.45894901962841333, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.2891561680168403, 'subsample':
0.8802674361316244}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:24,006] Trial 276 finished with value: 0.010676407575289506
and parameters: {'learning_rate': 0.46521722153062495, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.29399353540967527, 'subsample':
0.883790953282666}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:24,232] Trial 277 finished with value: 0.010009437504480696
and parameters: {'learning_rate': 0.44736040133997257, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2803157167807053, 'subsample':
0.8842822422786082}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:24,473] Trial 278 finished with value: 0.010898381165552857
and parameters: {'learning_rate': 0.4672195898240264, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.2616610403940747, 'subsample':
0.8846201414134718}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:24,702] Trial 279 finished with value: 0.010067896100712214
and parameters: {'learning_rate': 0.485959850624473, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.28443355242467366, 'subsample':
0.88039512431478}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:24,940] Trial 280 finished with value: 0.009636780437218256
and parameters: {'learning_rate': 0.46980170025365936, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.29106117358471784, 'subsample':
0.8844450654118388}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:25,183] Trial 281 finished with value: 0.009699127661305785
and parameters: {'learning_rate': 0.45279464504110273, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2860762297469328, 'subsample':
0.8842387528118365}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:25,426] Trial 282 finished with value: 0.011101209645226097
and parameters: {'learning_rate': 0.4969379195487949, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.32376038277493385, 'subsample':
0.8805688527594706}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:25,674] Trial 283 finished with value: 0.009187552393927503
and parameters: {'learning_rate': 0.5043340378509577, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2885916880376199, 'subsample':
0.8850166959700808}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:25,906] Trial 284 finished with value: 0.010291923818003822
and parameters: {'learning_rate': 0.4713868636448301, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.28838737014908766, 'subsample':
0.8849606917837284}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:26,144] Trial 285 finished with value: 0.010844038850403716
and parameters: {'learning_rate': 0.4734496820043694, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.3205584452630868, 'subsample':
0.885168316512005}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:26,386] Trial 286 finished with value: 0.010185279012772434
and parameters: {'learning_rate': 0.488916852969269, 'max_depth': 10,

'n_estimators': 158, 'reg_lambda': 0.2822576060833303, 'subsample':
0.8848507119743455}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:26,636] Trial 287 finished with value: 0.010628093026340376
and parameters: {'learning_rate': 0.4787771238546193, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.29036674779126037, 'subsample':
0.8812880826145636}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:26,866] Trial 288 finished with value: 0.010033636755794636
and parameters: {'learning_rate': 0.48335614456600456, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.2884396112421383, 'subsample':
0.8834630545714287}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:27,101] Trial 289 finished with value: 0.009884933706606935
and parameters: {'learning_rate': 0.5010340053946258, 'max_depth': 9,
'n_estimators': 170, 'reg_lambda': 0.3048790199184473, 'subsample':
0.880749523802616}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:27,343] Trial 290 finished with value: 0.011361660659690903
and parameters: {'learning_rate': 0.46705939953138825, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.27793148975193127, 'subsample':
0.8850602853328285}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:27,581] Trial 291 finished with value: 0.01034853439648141
and parameters: {'learning_rate': 0.4690496219446636, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.31194442993158744, 'subsample':
0.8809467914251082}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:27,817] Trial 292 finished with value: 0.010047574411211992
and parameters: {'learning_rate': 0.4755743961723765, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2957915075398553, 'subsample':
0.8847329564477718}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:28,037] Trial 293 finished with value: 0.009274731087525962
and parameters: {'learning_rate': 0.5073428561881017, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.3014006844664416, 'subsample':
0.8853574377592107}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:28,519] Trial 294 finished with value: 0.010935302230116562
and parameters: {'learning_rate': 0.5023346278233783, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.28718898856082464, 'subsample':
0.8849357493658684}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:29,406] Trial 295 finished with value: 0.010544912313610506
and parameters: {'learning_rate': 0.5051468908946424, 'max_depth': 10,
'n_estimators': 143, 'reg_lambda': 0.29223251197068484, 'subsample':
0.8852670296968606}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:30,841] Trial 296 finished with value: 0.010378335392245575
and parameters: {'learning_rate': 0.5037006174181669, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.32731903213605645, 'subsample':
0.8805025184427638}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:32,589] Trial 297 finished with value: 0.00885835482091227
and parameters: {'learning_rate': 0.4645638468963986, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.28516915013523386, 'subsample':
0.8802811730674964}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:32,910] Trial 298 finished with value: 0.01055728946548356
and parameters: {'learning_rate': 0.46389174902416064, 'max_depth': 10,

'n_estimators': 156, 'reg_lambda': 0.2847743719569234, 'subsample':
0.880117662929523}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:33,143] Trial 299 finished with value: 0.010611999016716377
and parameters: {'learning_rate': 0.4655575114038497, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.28258964140748843, 'subsample':
0.8802787636761541}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:33,373] Trial 300 finished with value: 0.011318365389813043
and parameters: {'learning_rate': 0.5095865204159943, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.28341515034060855, 'subsample':
0.8802748267026209}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:33,624] Trial 301 finished with value: 0.011384792068606864
and parameters: {'learning_rate': 0.49398817877685824, 'max_depth': 8,
'n_estimators': 159, 'reg_lambda': 0.2857836937249123, 'subsample':
0.8803396390202656}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:33,853] Trial 302 finished with value: 0.011090543135645645
and parameters: {'learning_rate': 0.4920681391606494, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2850981810665427, 'subsample':
0.88017296971107}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:34,109] Trial 303 finished with value: 0.010895404007842885
and parameters: {'learning_rate': 0.4629833161332703, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2808175420764917, 'subsample':
0.8804126319901492}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:34,345] Trial 304 finished with value: 0.011088576332774887
and parameters: {'learning_rate': 0.46750893929688525, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.2872833010599288, 'subsample':
0.8822863877576408}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:34,565] Trial 305 finished with value: 0.009896939973664249
and parameters: {'learning_rate': 0.510918063483156, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.2841837713304314, 'subsample':
0.884582406907294}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:34,794] Trial 306 finished with value: 0.008728401052361348
and parameters: {'learning_rate': 0.4652427015131565, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.28913732289820393, 'subsample':
0.8800434227206403}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:35,057] Trial 307 finished with value: 0.009711709648704119
and parameters: {'learning_rate': 0.4648017461550762, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.28609446387536847, 'subsample':
0.8800420220718341}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:35,294] Trial 308 finished with value: 0.010976248006439556
and parameters: {'learning_rate': 0.4619443756770466, 'max_depth': 9,
'n_estimators': 151, 'reg_lambda': 0.2894102859758331, 'subsample':
0.8800414463617684}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:35,537] Trial 309 finished with value: 0.010319037072260992
and parameters: {'learning_rate': 0.46964566044009554, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.3219281030699387, 'subsample':
0.8801352363934225}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:35,784] Trial 310 finished with value: 0.011309156610096214
and parameters: {'learning_rate': 0.4658417637247274, 'max_depth': 10,

'n_estimators': 156, 'reg_lambda': 0.3290532737102122, 'subsample':
0.8801874851766861}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:36,064] Trial 311 finished with value: 0.011804048333916071
and parameters: {'learning_rate': 0.46714004025017425, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.3255037916928162, 'subsample':
0.8840995773247604}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:36,304] Trial 312 finished with value: 0.010238426886203675
and parameters: {'learning_rate': 0.46379867817577836, 'max_depth': 10,
'n_estimators': 149, 'reg_lambda': 0.2868573896107974, 'subsample':
0.8802173288115002}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:36,535] Trial 313 finished with value: 0.011708809813635 12
and parameters: {'learning_rate': 0.47133864429450056, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2824959973190696, 'subsample':
0.8803702693398375}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:36,777] Trial 314 finished with value: 0.009508157283096586
and parameters: {'learning_rate': 0.4660752421004737, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.2904713722072407, 'subsample':
0.884332105986065}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:37,026] Trial 315 finished with value: 0.010288568151286 33
and parameters: {'learning_rate': 0.46915704432412736, 'max_depth': 10,
'n_estimators': 148, 'reg_lambda': 0.28439009076952476, 'subsample':
0.8839185504378723}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:37,257] Trial 316 finished with value: 0.010079340322887183
and parameters: {'learning_rate': 0.44948601567102797, 'max_depth': 10,
'n_estimators': 147, 'reg_lambda': 0.28801728452347, 'subsample':
0.8806189087398549}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:37,492] Trial 317 finished with value: 0.010699231203797607
and parameters: {'learning_rate': 0.46050451037428597, 'max_depth': 10,
'n_estimators': 136, 'reg_lambda': 0.2976862281406602, 'subsample':
0.8805077806675466}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:37,723] Trial 318 finished with value: 0.013010845272012173
and parameters: {'learning_rate': 0.4631631346103066, 'max_depth': 10,
'n_estimators': 150, 'reg_lambda': 0.3151411784029135, 'subsample':
0.8844311400276982}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:37,975] Trial 319 finished with value: 0.010721531769879 81
and parameters: {'learning_rate': 0.4450477162433841, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2861933092840185, 'subsample':
0.8820308088333035}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:38,206] Trial 320 finished with value: 0.009592172893337 29
and parameters: {'learning_rate': 0.5298894760653514, 'max_depth': 10,
'n_estimators': 151, 'reg_lambda': 0.2853794026989092, 'subsample':
0.8832952995495403}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:38,448] Trial 321 finished with value: 0.008439833109995866
and parameters: {'learning_rate': 0.46826998370282263, 'max_depth': 10,
'n_estimators': 146, 'reg_lambda': 0.2895281066872439, 'subsample':
0.8800339002691722}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:38,681] Trial 322 finished with value: 0.009106636712637332
and parameters: {'learning_rate': 0.4681914353076019, 'max_depth': 10,

'n_estimators': 155, 'reg_lambda': 0.2906594500484102, 'subsample':
0.8800386012125192}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:38,908] Trial 323 finished with value: 0.008639680438601251
and parameters: {'learning_rate': 0.46840173784882283, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.291310514114812, 'subsample':
0.8800984979836058}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:39,176] Trial 324 finished with value: 0.010209593240094308
and parameters: {'learning_rate': 0.4684654564630219, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.29411731368132943, 'subsample':
0.8800613087915721}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:39,416] Trial 325 finished with value: 0.010598345560247881
and parameters: {'learning_rate': 0.47097457590872044, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2930337005146036, 'subsample':
0.8800490899668182}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:39,644] Trial 326 finished with value: 0.010617821986372386
and parameters: {'learning_rate': 0.46829989693885415, 'max_depth': 9,
'n_estimators': 154, 'reg_lambda': 0.29184935890558467, 'subsample':
0.8801267631153559}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:39,875] Trial 327 finished with value: 0.01018898330124715
and parameters: {'learning_rate': 0.47251253697011686, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.29115980646979855, 'subsample':
0.8800291228463171}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:40,153] Trial 328 finished with value: 0.009533836368751944
and parameters: {'learning_rate': 0.46605750873719864, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2896553631998182, 'subsample':
0.8802312619129745}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:40,397] Trial 329 finished with value: 0.009444272138640946
and parameters: {'learning_rate': 0.470513117679777, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2907236913643816, 'subsample':
0.8802462110723773}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:40,624] Trial 330 finished with value: 0.010630092182559758
and parameters: {'learning_rate': 0.46716085430111076, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2923199684064801, 'subsample':
0.8800232319617485}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:40,853] Trial 331 finished with value: 0.009966284120415957
and parameters: {'learning_rate': 0.4652659053357045, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.2892570513225217, 'subsample':
0.8801390509046252}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:41,100] Trial 332 finished with value: 0.010365951609226914
and parameters: {'learning_rate': 0.4688945361586407, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2902521739703202, 'subsample':
0.8800051053977825}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:41,360] Trial 333 finished with value: 0.0104637486061981
and parameters: {'learning_rate': 0.4636484000718251, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2886399594404419, 'subsample':
0.8801921508871073}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:41,586] Trial 334 finished with value: 0.009884990526479027
and parameters: {'learning_rate': 0.4668560113546663, 'max_depth': 10,

'n_estimators': 152, 'reg_lambda': 0.29173955669571006, 'subsample':
0.880333497894299}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:41,822] Trial 335 finished with value: 0.010612450040653065
and parameters: {'learning_rate': 0.46935216858314704, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2950334142236601, 'subsample':
0.8803883731002109}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:42,056] Trial 336 finished with value: 0.009863325149044463
and parameters: {'learning_rate': 0.47212011442619456, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.28777140373569315, 'subsample':
0.8800026490857683}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:42,336] Trial 337 finished with value: 0.009916954654711431
and parameters: {'learning_rate': 0.4645289533035265, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.28956285278435673, 'subsample':
0.8802615779375084}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:42,575] Trial 338 finished with value: 0.009051242928033708
and parameters: {'learning_rate': 0.46762019553702455, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.28754383434497816, 'subsample':
0.8801266568853833}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:42,949] Trial 339 finished with value: 0.01019330114326075
and parameters: {'learning_rate': 0.4701871518483208, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.28738555514552727, 'subsample':
0.8801425254985997}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:43,929] Trial 340 finished with value: 0.008033854970174033
and parameters: {'learning_rate': 0.4673877328970776, 'max_depth': 10,
'n_estimators': 108, 'reg_lambda': 0.28865721444574405, 'subsample':
0.8803068483694902}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:44,511] Trial 341 finished with value: 0.010233983524460094
and parameters: {'learning_rate': 0.47195662091187845, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.28883888021748205, 'subsample':
0.8802546621009733}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:45,721] Trial 342 finished with value: 0.009920900216954468
and parameters: {'learning_rate': 0.4680231366619523, 'max_depth': 8,
'n_estimators': 126, 'reg_lambda': 0.2904876339377928, 'subsample':
0.8803437832123452}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:46,570] Trial 343 finished with value: 0.009918360900968214
and parameters: {'learning_rate': 0.47336585830244066, 'max_depth': 10,
'n_estimators': 101, 'reg_lambda': 0.28795337107737734, 'subsample':
0.880464988633943}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:47,698] Trial 344 finished with value: 0.00966175620277974
and parameters: {'learning_rate': 0.4679805218885001, 'max_depth': 10,
'n_estimators': 129, 'reg_lambda': 0.2932833501709469, 'subsample':
0.8802086745201508}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:47,940] Trial 345 finished with value: 0.009764929579364751
and parameters: {'learning_rate': 0.4704558487155013, 'max_depth': 10,
'n_estimators': 118, 'reg_lambda': 0.28938807729010585, 'subsample':
0.8801326424313799}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:48,196] Trial 346 finished with value: 0.009943749853739647
and parameters: {'learning_rate': 0.4656554549658969, 'max_depth': 10,

'n_estimators': 161, 'reg_lambda': 0.28731167443981204, 'subsample':
0.880400825486754}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:48,424] Trial 347 finished with value: 0.010176078679537327
and parameters: {'learning_rate': 0.46703803821336903, 'max_depth': 10,
'n_estimators': 110, 'reg_lambda': 0.2909099911780244, 'subsample':
0.8801253893872758}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:48,678] Trial 348 finished with value: 0.009821430877952377
and parameters: {'learning_rate': 0.4699423329969747, 'max_depth': 10,
'n_estimators': 114, 'reg_lambda': 0.28682591202586144, 'subsample':
0.8805230494531283}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:48,903] Trial 349 finished with value: 0.009277292554824304
and parameters: {'learning_rate': 0.4677785749621365, 'max_depth': 10,
'n_estimators': 104, 'reg_lambda': 0.2884639280172135, 'subsample':
0.8802932508706821}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:49,127] Trial 350 finished with value: 0.009874740757166819
and parameters: {'learning_rate': 0.4656800698782445, 'max_depth': 10,
'n_estimators': 107, 'reg_lambda': 0.28934620836187963, 'subsample':
0.8827932138313888}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:49,372] Trial 351 finished with value: 0.010930059435298423
and parameters: {'learning_rate': 0.473846745232191, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2865309364875983, 'subsample':
0.8800011565767983}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:49,625] Trial 352 finished with value: 0.010262765315367817
and parameters: {'learning_rate': 0.4687993268758198, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2912100835385187, 'subsample':
0.8806092171390221}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:49,871] Trial 353 finished with value: 0.010499953486361492
and parameters: {'learning_rate': 0.4663026731790069, 'max_depth': 10,
'n_estimators': 122, 'reg_lambda': 0.288499019748416, 'subsample':
0.8803774062146957}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:50,126] Trial 354 finished with value: 0.00944227056210612
and parameters: {'learning_rate': 0.4640169616529824, 'max_depth': 10,
'n_estimators': 144, 'reg_lambda': 0.29013171643287183, 'subsample':
0.8801560440587574}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:50,371] Trial 355 finished with value: 0.01000616303140839
and parameters: {'learning_rate': 0.4703512172655895, 'max_depth': 9,
'n_estimators': 156, 'reg_lambda': 0.28606735083962054, 'subsample':
0.8803088885489092}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:50,638] Trial 356 finished with value: 0.00987420042513987
and parameters: {'learning_rate': 0.4622097373036374, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.28740544560555203, 'subsample':
0.8806962806449333}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:50,886] Trial 357 finished with value: 0.009511084850868367
and parameters: {'learning_rate': 0.48766444650314106, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2926775481440444, 'subsample':
0.8859907891686993}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:51,128] Trial 358 finished with value: 0.009866321155673827
and parameters: {'learning_rate': 0.46820004788387654, 'max_depth': 10,

'n_estimators': 162, 'reg_lambda': 0.28537120623994594, 'subsample':
0.8804279664850622}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:51,368] Trial 359 finished with value: 0.010100880298910953
and parameters: {'learning_rate': 0.4718373007501113, 'max_depth': 10,
'n_estimators': 139, 'reg_lambda': 0.2881451581396016, 'subsample':
0.8802094244121513}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:51,626] Trial 360 finished with value: 0.00961704084099157
and parameters: {'learning_rate': 0.4658440295239311, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2903100556593432, 'subsample':
0.8800057236300266}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:51,860] Trial 361 finished with value: 0.010558406069530468
and parameters: {'learning_rate': 0.5151490327073621, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2868691805493761, 'subsample':
0.8808099188646684}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:52,100] Trial 362 finished with value: 0.009863513136618677
and parameters: {'learning_rate': 0.46848805078514294, 'max_depth': 10,
'n_estimators': 141, 'reg_lambda': 0.2888719074191958, 'subsample':
0.8801436834217834}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:52,356] Trial 363 finished with value: 0.009391843039876393
and parameters: {'learning_rate': 0.46378079539324535, 'max_depth': 10,
'n_estimators': 169, 'reg_lambda': 0.2921134062815386, 'subsample':
0.8802939522968535}. Best is trial 72 with value: 0.007935691776980997.
[I 2024-08-30 19:43:52,588] Trial 364 finished with value: 0.007853518737013615
and parameters: {'learning_rate': 0.4665548121548942, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.28569985327075614, 'subsample':
0.8805468246295064}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:52,843] Trial 365 finished with value: 0.011487888382824553
and parameters: {'learning_rate': 0.46144332296968676, 'max_depth': 10,
'n_estimators': 145, 'reg_lambda': 0.28532685075346287, 'subsample':
0.8805935730739969}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:53,129] Trial 366 finished with value: 0.011428804154862748
and parameters: {'learning_rate': 0.4653417204903979, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.3103295756935494, 'subsample':
0.8804924758955324}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:53,398] Trial 367 finished with value: 0.008843679250099004
and parameters: {'learning_rate': 0.4667079374535038, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.28444150204687585, 'subsample':
0.8806240210779873}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:53,640] Trial 368 finished with value: 0.010309410019606481
and parameters: {'learning_rate': 0.4637868114305284, 'max_depth': 9,
'n_estimators': 152, 'reg_lambda': 0.2839654702797648, 'subsample':
0.8806140873304021}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:53,889] Trial 369 finished with value: 0.0087871530360612
and parameters: {'learning_rate': 0.4669214649752347, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.285401686434807, 'subsample':
0.8806653929220835}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:54,123] Trial 370 finished with value: 0.010610629647441519
and parameters: {'learning_rate': 0.48153526786253464, 'max_depth': 10,

'n_estimators': 154, 'reg_lambda': 0.2844935050613822, 'subsample':
0.8807658970200356}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:54,368] Trial 371 finished with value: 0.009236041963196188
and parameters: {'learning_rate': 0.46623363035862825, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2856386920429703, 'subsample':
0.880999049823002}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:54,587] Trial 372 finished with value: 0.009723961551436872
and parameters: {'learning_rate': 0.48447762954873014, 'max_depth': 10,
'n_estimators': 138, 'reg_lambda': 0.2842140944048027, 'subsample':
0.8807984077815258}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:54,844] Trial 373 finished with value: 0.009218706233286363
and parameters: {'learning_rate': 0.47021408845488183, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.28616883173034763, 'subsample':
0.880486757119962}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:55,114] Trial 374 finished with value: 0.01074852213608482
and parameters: {'learning_rate': 0.4676882935313887, 'max_depth': 8,
'n_estimators': 157, 'reg_lambda': 0.2867660523806628, 'subsample':
0.8806944101200282}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:55,353] Trial 375 finished with value: 0.01023446906913721
and parameters: {'learning_rate': 0.4647464103100048, 'max_depth': 10,
'n_estimators': 153, 'reg_lambda': 0.28508454354736446, 'subsample':
0.8806858438470346}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:55,579] Trial 376 finished with value: 0.00871841307241852
and parameters: {'learning_rate': 0.46695815578777006, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.283326020656707, 'subsample':
0.8804297950901738}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:55,846] Trial 377 finished with value: 0.008874979878212091
and parameters: {'learning_rate': 0.46695067251608435, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2832198954190561, 'subsample':
0.8804317126004888}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:56,087] Trial 378 finished with value: 0.009950862861919856
and parameters: {'learning_rate': 0.46219734143438046, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.28276275761764574, 'subsample':
0.8805617852974945}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:56,340] Trial 379 finished with value: 0.011177486103283668
and parameters: {'learning_rate': 0.46005722421430023, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2841991028035933, 'subsample':
0.8804457410949709}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:56,573] Trial 380 finished with value: 0.010782413039793558
and parameters: {'learning_rate': 0.46658042532219923, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.28255213034036075, 'subsample':
0.8808699741221544}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:56,843] Trial 381 finished with value: 0.009555623065185577
and parameters: {'learning_rate': 0.46982368575317046, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2840758840493633, 'subsample':
0.8805309463108145}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:57,076] Trial 382 finished with value: 0.011271234927886996
and parameters: {'learning_rate': 0.4641530318052375, 'max_depth': 10,

'n_estimators': 154, 'reg_lambda': 0.2835323076173412, 'subsample':
0.8803851263762213}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:57,307] Trial 383 finished with value: 0.009823936541593123
and parameters: {'learning_rate': 0.4663764082575784, 'max_depth': 10,
'n_estimators': 133, 'reg_lambda': 0.27040765990647275, 'subsample':
0.8805929161581185}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:57,545] Trial 384 finished with value: 0.009914064622121 36
and parameters: {'learning_rate': 0.47166851234809526, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2817946133271433, 'subsample':
0.8804334728867155}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:58,091] Trial 385 finished with value: 0.008832520462332518
and parameters: {'learning_rate': 0.4693563091954655, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.2849976183537052, 'subsample':
0.8814953535276107}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:43:59,024] Trial 386 finished with value: 0.010101925402080018
and parameters: {'learning_rate': 0.46979076910215023, 'max_depth': 10,
'n_estimators': 170, 'reg_lambda': 0.2855638589671707, 'subsample':
0.8817906279709825}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:00,419] Trial 387 finished with value: 0.009343923624135029
and parameters: {'learning_rate': 0.4720167283995621, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.28322369260695435, 'subsample':
0.8856345778804959}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:01,021] Trial 388 finished with value: 0.010251838862980511
and parameters: {'learning_rate': 0.47470324489695515, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.2847904324888268, 'subsample':
0.8806875346066632}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:02,478] Trial 389 finished with value: 0.010727337202760959
and parameters: {'learning_rate': 0.4677444827914061, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.2835574176191635, 'subsample':
0.8858399389718655}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:02,714] Trial 390 finished with value: 0.009100126690731 67
and parameters: {'learning_rate': 0.4693916792037665, 'max_depth': 10,
'n_estimators': 169, 'reg_lambda': 0.2803218954871066, 'subsample':
0.8811855504334771}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:02,963] Trial 391 finished with value: 0.007938519443274377
and parameters: {'learning_rate': 0.4662678167304058, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.2853877016104347, 'subsample':
0.8803143398334705}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:03,236] Trial 392 finished with value: 0.010002833057945065
and parameters: {'learning_rate': 0.4650675873489196, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.28522683587349024, 'subsample':
0.8814218465560872}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:03,483] Trial 393 finished with value: 0.010151707181297 77
and parameters: {'learning_rate': 0.4667495594470262, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.28109131404686005, 'subsample':
0.8816377596500041}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:03,754] Trial 394 finished with value: 0.011226664872675911
and parameters: {'learning_rate': 0.46279312448870813, 'max_depth': 10,

'n_estimators': 165, 'reg_lambda': 0.2829977869601317, 'subsample':
0.8803704688377034}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:04,007] Trial 395 finished with value: 0.009308656957327 and
parameters: {'learning_rate': 0.4687324881184527, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2863165871596271, 'subsample':
0.8810254953283407}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:04,266] Trial 396 finished with value: 0.010159986297724391
and parameters: {'learning_rate': 0.4648519178154651, 'max_depth': 10,
'n_estimators': 168, 'reg_lambda': 0.28542821788564476, 'subsample':
0.8805147733381425}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:04,501] Trial 397 finished with value: 0.009912964463943977
and parameters: {'learning_rate': 0.4705732866856347, 'max_depth': 10,
'n_estimators': 167, 'reg_lambda': 0.28344962177057637, 'subsample':
0.8808838990145986}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:04,742] Trial 398 finished with value: 0.009311676657224101
and parameters: {'learning_rate': 0.4670001337650156, 'max_depth': 10,
'n_estimators': 165, 'reg_lambda': 0.28621947845131207, 'subsample':
0.8803169606644695}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:04,982] Trial 399 finished with value: 0.010095232809473763
and parameters: {'learning_rate': 0.4634157357469762, 'max_depth': 9,
'n_estimators': 136, 'reg_lambda': 0.284858460200608, 'subsample':
0.880660529160143}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:05,253] Trial 400 finished with value: 0.009001221938933088
and parameters: {'learning_rate': 0.4736728725776918, 'max_depth': 10,
'n_estimators': 166, 'reg_lambda': 0.2871222062401395, 'subsample':
0.882977824502011}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:05,490] Trial 401 finished with value: 0.01003097515443886
and parameters: {'learning_rate': 0.46894917746451886, 'max_depth': 10,
'n_estimators': 140, 'reg_lambda': 0.28277138817413555, 'subsample':
0.8804836063003132}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:05,732] Trial 402 finished with value: 0.010436602180594293
and parameters: {'learning_rate': 0.4658308611869578, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2869009601790328, 'subsample':
0.8815282986376943}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:05,985] Trial 403 finished with value: 0.010053305884752324
and parameters: {'learning_rate': 0.46034011433926414, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.2845081593975264, 'subsample':
0.8807873062848626}. Best is trial 364 with value: 0.007853518737013615.
[I 2024-08-30 19:44:06,256] Trial 404 finished with value: 0.007753633940269811
and parameters: {'learning_rate': 0.46656879914312943, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.28621061308535845, 'subsample':
0.8802939963191146}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:06,517] Trial 405 finished with value: 0.009760451809781969
and parameters: {'learning_rate': 0.4626477864475474, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.28177805574121245, 'subsample':
0.8802639956824979}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:06,759] Trial 406 finished with value: 0.009928453196192021
and parameters: {'learning_rate': 0.46482791809436774, 'max_depth': 10,

'n_estimators': 153, 'reg_lambda': 0.28546693372488896, 'subsample':
0.8806199194154973}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:07,010] Trial 407 finished with value: 0.009547133942789362
and parameters: {'learning_rate': 0.46697546914835425, 'max_depth': 10,
'n_estimators': 154, 'reg_lambda': 0.2839877755411791, 'subsample':
0.8836079400590097}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:07,287] Trial 408 finished with value: 0.009004131894179585
and parameters: {'learning_rate': 0.4647079308956563, 'max_depth': 10,
'n_estimators': 152, 'reg_lambda': 0.2863244337674877, 'subsample':
0.8802884199552774}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:07,526] Trial 409 finished with value: 0.010991603776232489
and parameters: {'learning_rate': 0.46152473159797247, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2853734808385873, 'subsample':
0.880467893943209}. Best is trial 404 with value: 0.007753633940269811.
[I 2024-08-30 19:44:07,773] Trial 410 finished with value: 0.007727098195204591
and parameters: {'learning_rate': 0.4669790251338014, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.27959956779258466, 'subsample':
0.8805770870485977}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:08,012] Trial 411 finished with value: 0.00799553117383896
and parameters: {'learning_rate': 0.467158927499218, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.280541036686569, 'subsample':
0.8806052213800267}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:08,274] Trial 412 finished with value: 0.008373533495864617
and parameters: {'learning_rate': 0.4671932334749373, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.28125738764015323, 'subsample':
0.8805895841603854}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:08,515] Trial 413 finished with value: 0.00957930894515583
and parameters: {'learning_rate': 0.4705441101796787, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.279482692215201, 'subsample':
0.880566784036001}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:08,747] Trial 414 finished with value: 0.008165612488689793
and parameters: {'learning_rate': 0.4676447296175431, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2794090556351517, 'subsample':
0.8804233415529094}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:09,003] Trial 415 finished with value: 0.010091728562732402
and parameters: {'learning_rate': 0.46783912109271936, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.27598021738032125, 'subsample':
0.8803608771677659}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:09,253] Trial 416 finished with value: 0.00776692182727222
and parameters: {'learning_rate': 0.4668596042597683, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.27847312721820144, 'subsample':
0.8804136652057176}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:09,497] Trial 417 finished with value: 0.010286772717644287
and parameters: {'learning_rate': 0.4695191856930686, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27785143265152557, 'subsample':
0.8802873730388577}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:09,733] Trial 418 finished with value: 0.008568461304431518
and parameters: {'learning_rate': 0.4662159012808229, 'max_depth': 10,

'n_estimators': 157, 'reg_lambda': 0.2746948256033737, 'subsample':
0.880495753308318}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:09,964] Trial 419 finished with value: 0.01154140741117416
and parameters: {'learning_rate': 0.4708515279890632, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2774461469395089, 'subsample':
0.8805269519279104}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:10,211] Trial 420 finished with value: 0.01013754152684142
and parameters: {'learning_rate': 0.46721824298095976, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2738342460823041, 'subsample':
0.8804246262004771}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:10,471] Trial 421 finished with value: 0.008945355311457629
and parameters: {'learning_rate': 0.4687328069541867, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2745915713465752, 'subsample':
0.8806213777598545}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:10,704] Trial 422 finished with value: 0.009188544738880254
and parameters: {'learning_rate': 0.4723283416004726, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2788249643971509, 'subsample':
0.8805215223549855}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:10,947] Trial 423 finished with value: 0.007947093637757785
and parameters: {'learning_rate': 0.4661677931790224, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.27606917561964983, 'subsample':
0.8804041036540325}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:11,213] Trial 424 finished with value: 0.011527947071562683
and parameters: {'learning_rate': 0.46562889020803, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2754650023736042, 'subsample':
0.8802364214822807}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:11,489] Trial 425 finished with value: 0.009420972446776659
and parameters: {'learning_rate': 0.4687856444920713, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2772240328626272, 'subsample':
0.8803846612355688}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:11,723] Trial 426 finished with value: 0.010954165817573002
and parameters: {'learning_rate': 0.46367784903664233, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2713202091115431, 'subsample':
0.8804214596686744}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:11,973] Trial 427 finished with value: 0.010223766763942092
and parameters: {'learning_rate': 0.46580610858283, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27359437086283267, 'subsample':
0.8821963838408793}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:12,217] Trial 428 finished with value: 0.009139575832597585
and parameters: {'learning_rate': 0.47135100695885834, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2763714699457514, 'subsample':
0.8825389932695499}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:12,624] Trial 429 finished with value: 0.008729658771617821
and parameters: {'learning_rate': 0.4681324780902196, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2799781961873693, 'subsample':
0.8802226379313058}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:13,456] Trial 430 finished with value: 0.011095662225651774
and parameters: {'learning_rate': 0.46279629535817524, 'max_depth': 10,

'n_estimators': 159, 'reg_lambda': 0.2788230394973544, 'subsample':
0.8801928801314192}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:14,073] Trial 431 finished with value: 0.0081080017684 and
parameters: {'learning_rate': 0.4673313452728063, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.279647462472265, 'subsample':
0.8803576878362216}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:15,335] Trial 432 finished with value: 0.008964022517771454
and parameters: {'learning_rate': 0.4680717360281343, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.27977533907881125, 'subsample':
0.8802158005857855}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:17,215] Trial 433 finished with value: 0.010489763480763055
and parameters: {'learning_rate': 0.4584748417505027, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2787527167913274, 'subsample':
0.8803330435087893}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:17,455] Trial 434 finished with value: 0.01116575813132572
and parameters: {'learning_rate': 0.46574833355380496, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2757105566697155, 'subsample':
0.8801896378689924}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:17,728] Trial 435 finished with value: 0.008288014645414808
and parameters: {'learning_rate': 0.4675412212001549, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.28016717516922507, 'subsample':
0.8803245587987726}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:17,974] Trial 436 finished with value: 0.009557352947041683
and parameters: {'learning_rate': 0.4702362166410783, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.277334577569422, 'subsample':
0.8803219403893731}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:18,218] Trial 437 finished with value: 0.008311867532805122
and parameters: {'learning_rate': 0.4675057506156023, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2799334539140213, 'subsample':
0.880114866795891}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:18,471] Trial 438 finished with value: 0.00963380530163916
and parameters: {'learning_rate': 0.47170484904266174, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2805151490988675, 'subsample':
0.8801248377178811}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:18,718] Trial 439 finished with value: 0.009563267279908473
and parameters: {'learning_rate': 0.46385314414157247, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.28097766364548427, 'subsample':
0.8801074502295316}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:18,976] Trial 440 finished with value: 0.010939651795383606
and parameters: {'learning_rate': 0.46829469336287133, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2792184607244477, 'subsample':
0.8802311878928182}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:19,228] Trial 441 finished with value: 0.010702176366404052
and parameters: {'learning_rate': 0.46572495943706554, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.27853986552448107, 'subsample':
0.8801194049867087}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:19,472] Trial 442 finished with value: 0.010115854315774966
and parameters: {'learning_rate': 0.4729027227805059, 'max_depth': 10,

'n_estimators': 157, 'reg_lambda': 0.2764589300271975, 'subsample':
0.8803437667463597}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:19,704] Trial 443 finished with value: 0.010684740821696114
and parameters: {'learning_rate': 0.46943901771259483, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2799772229107181, 'subsample':
0.8802509627615733}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:19,958] Trial 444 finished with value: 0.01134180615420078
and parameters: {'learning_rate': 0.46143116634027226, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2779267732930985, 'subsample':
0.8803923806095056}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:20,217] Trial 445 finished with value: 0.0083234679222388
and parameters: {'learning_rate': 0.46745077082671127, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.27968948539917665, 'subsample':
0.8801587325168007}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:20,462] Trial 446 finished with value: 0.009902874515378735
and parameters: {'learning_rate': 0.46435552649888845, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.27452802124786474, 'subsample':
0.880131713300155}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:20,702] Trial 447 finished with value: 0.008392217150141988
and parameters: {'learning_rate': 0.4667132552233299, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.27826426382397995, 'subsample':
0.8800062439000415}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:20,982] Trial 448 finished with value: 0.007780025730872833
and parameters: {'learning_rate': 0.4666920464709089, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.278061374280521, 'subsample':
0.8804609673426013}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:21,232] Trial 449 finished with value: 0.009220390653284507
and parameters: {'learning_rate': 0.4703097101525733, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2773649464519274, 'subsample':
0.880128872915566}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:21,471] Trial 450 finished with value: 0.010003255299429971
and parameters: {'learning_rate': 0.46291922252987544, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.27225814388707936, 'subsample':
0.8800035904587438}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:21,707] Trial 451 finished with value: 0.008160231728934271
and parameters: {'learning_rate': 0.4670971611740661, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2787584472098692, 'subsample':
0.8803211443748371}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:21,984] Trial 452 finished with value: 0.008401985848153205
and parameters: {'learning_rate': 0.4662732199029155, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27860349964767955, 'subsample':
0.8805035605833057}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:22,233] Trial 453 finished with value: 0.009263520890914026
and parameters: {'learning_rate': 0.46412527884965543, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.278487088125146, 'subsample':
0.8803284437821832}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:22,475] Trial 454 finished with value: 0.008399669788887242
and parameters: {'learning_rate': 0.4667743669346896, 'max_depth': 10,

'n_estimators': 160, 'reg_lambda': 0.27665631372716937, 'subsample':
0.8804763550759703}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:22,705] Trial 455 finished with value: 0.008269710195844765
and parameters: {'learning_rate': 0.46686696832253155, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2766414806376496, 'subsample':
0.8804762649611957}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:22,968] Trial 456 finished with value: 0.007875089333308875
and parameters: {'learning_rate': 0.4671576529245373, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2770368190402929, 'subsample':
0.8805045272657684}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:23,211] Trial 457 finished with value: 0.008080331851020833
and parameters: {'learning_rate': 0.46661703574169106, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27616882889638394, 'subsample':
0.8805434028528227}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:23,526] Trial 458 finished with value: 0.007763380042733452
and parameters: {'learning_rate': 0.46695185919604915, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27687440786955225, 'subsample':
0.8805243582016349}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:23,756] Trial 459 finished with value: 0.009975378340392627
and parameters: {'learning_rate': 0.4645853656011614, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.27604684066451246, 'subsample':
0.8805605955531688}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:24,018] Trial 460 finished with value: 0.009915734165251986
and parameters: {'learning_rate': 0.469794519709577, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2769285999963488, 'subsample':
0.8804147649735262}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:24,262] Trial 461 finished with value: 0.009312144127812725
and parameters: {'learning_rate': 0.4677438981661595, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2778358600054064, 'subsample':
0.8805688403525763}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:24,491] Trial 462 finished with value: 0.010899347470592895
and parameters: {'learning_rate': 0.46233050230035305, 'max_depth': 10,
'n_estimators': 129, 'reg_lambda': 0.2751233675314214, 'subsample':
0.8806952779961997}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:24,728] Trial 463 finished with value: 0.009558439247974978
and parameters: {'learning_rate': 0.4654318283587509, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.279429879505392, 'subsample':
0.8803549826026832}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:24,997] Trial 464 finished with value: 0.010902433706679267
and parameters: {'learning_rate': 0.4708797622406121, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.27692855579786585, 'subsample':
0.8805837720548966}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:25,237] Trial 465 finished with value: 0.008918209254512775
and parameters: {'learning_rate': 0.46782876091576236, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2798916774103371, 'subsample':
0.8804678296520327}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:25,477] Trial 466 finished with value: 0.009808263303332995
and parameters: {'learning_rate': 0.46348958795762707, 'max_depth': 10,

'n_estimators': 123, 'reg_lambda': 0.278294537502007, 'subsample':
0.8803170861116429}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:25,721] Trial 467 finished with value: 0.011216241314064752
and parameters: {'learning_rate': 0.4692465849134879, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.27559890623491695, 'subsample':
0.8807684452131634}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:25,979] Trial 468 finished with value: 0.009564181669880746
and parameters: {'learning_rate': 0.4663669972533536, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27362792188212026, 'subsample':
0.8804226530493113}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:26,245] Trial 469 finished with value: 0.010209880459398387
and parameters: {'learning_rate': 0.47277155999692116, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2805723634293626, 'subsample':
0.880601016179358}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:26,482] Trial 470 finished with value: 0.010430397551111636
and parameters: {'learning_rate': 0.4646482739051648, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2776823927517684, 'subsample':
0.8803059138400666}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:26,724] Trial 471 finished with value: 0.009043555657450509
and parameters: {'learning_rate': 0.4680351189726115, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.27898705993465334, 'subsample':
0.8804926955226855}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:26,967] Trial 472 finished with value: 0.01128288385822804
and parameters: {'learning_rate': 0.4615384003379542, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2763995078693293, 'subsample':
0.880659970170959}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:27,309] Trial 473 finished with value: 0.010508096427413292
and parameters: {'learning_rate': 0.47064689629645823, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.279403981600335, 'subsample':
0.8804205641382683}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:28,063] Trial 474 finished with value: 0.009974149862743661
and parameters: {'learning_rate': 0.4655363802275173, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.2808291282717644, 'subsample':
0.880253051908568}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:28,959] Trial 475 finished with value: 0.00879103233064451
and parameters: {'learning_rate': 0.4678548949408569, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.27755681964062023, 'subsample':
0.8805394443892922}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:30,197] Trial 476 finished with value: 0.009457750706549604
and parameters: {'learning_rate': 0.46387272204891516, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.275187547396677, 'subsample':
0.8803358950013104}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:30,919] Trial 477 finished with value: 0.007968933923430534
and parameters: {'learning_rate': 0.4667425718519761, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2788303116908704, 'subsample':
0.8803987432067131}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:31,569] Trial 478 finished with value: 0.01014320428586296
and parameters: {'learning_rate': 0.46984225634017646, 'max_depth': 10,

'n_estimators': 159, 'reg_lambda': 0.28040393455489093, 'subsample':
0.8807229822022635}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:31,819] Trial 479 finished with value: 0.010070910391135179
and parameters: {'learning_rate': 0.465412164636149, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.276127548122013, 'subsample':
0.8805357420901138}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:32,067] Trial 480 finished with value: 0.009781521751895627
and parameters: {'learning_rate': 0.46243892425702393, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.27904967018453963, 'subsample':
0.8803875350521435}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:32,332] Trial 481 finished with value: 0.008695691806859834
and parameters: {'learning_rate': 0.46780686859677495, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2769207482911172, 'subsample':
0.8806346163177686}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:32,574] Trial 482 finished with value: 0.009965966812109463
and parameters: {'learning_rate': 0.4717766320053366, 'max_depth': 10,
'n_estimators': 158, 'reg_lambda': 0.27337518697106566, 'subsample':
0.8804861729417158}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:32,815] Trial 483 finished with value: 0.00974164392085293
and parameters: {'learning_rate': 0.4688930866895855, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2808550709507706, 'subsample':
0.8804014457611707}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:33,065] Trial 484 finished with value: 0.0109865976713194
and parameters: {'learning_rate': 0.46596102186061156, 'max_depth': 10,
'n_estimators': 157, 'reg_lambda': 0.2791492145642144, 'subsample':
0.8802653233382357}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:33,316] Trial 485 finished with value: 0.009684977775964752
and parameters: {'learning_rate': 0.46068459296355896, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.2777629050886913, 'subsample':
0.8808384079120094}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:33,588] Trial 486 finished with value: 0.010977074295519215
and parameters: {'learning_rate': 0.4637250849319117, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2811729013253924, 'subsample':
0.880566311097464}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:33,843] Trial 487 finished with value: 0.009563338226549326
and parameters: {'learning_rate': 0.4695342944327918, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.2759112430968689, 'subsample':
0.880433396717933}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:34,099] Trial 488 finished with value: 0.011155826969112994
and parameters: {'learning_rate': 0.4666429821492692, 'max_depth': 10,
'n_estimators': 156, 'reg_lambda': 0.2795143676247333, 'subsample':
0.8807446966735467}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:34,359] Trial 489 finished with value: 0.009665656664531164
and parameters: {'learning_rate': 0.47280987073802433, 'max_depth': 10,
'n_estimators': 159, 'reg_lambda': 0.27429141930044315, 'subsample':
0.8802947534357339}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:34,631] Trial 490 finished with value: 0.009585698953081354
and parameters: {'learning_rate': 0.464743095087393, 'max_depth': 10,

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'n_estimators': 131, 'reg_lambda': 0.27741996720788226, 'subsample':
0.8806327740066732}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:34,886] Trial 491 finished with value: 0.00814673325631538
and parameters: {'learning_rate': 0.46761871632495644, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.28038899955460767, 'subsample':
0.88045785077156}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:35,149] Trial 492 finished with value: 0.011122273124051237
and parameters: {'learning_rate': 0.47058133090380716, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.28082006003207066, 'subsample':
0.8802599664845774}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:35,402] Trial 493 finished with value: 0.008320936853856578
and parameters: {'learning_rate': 0.4674833118316782, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.27944684753685906, 'subsample':
0.8803973689630121}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:35,653] Trial 494 finished with value: 0.010506131061392157
and parameters: {'learning_rate': 0.46912704535569344, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.27837250952551496, 'subsample':
0.8803774575184623}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:35,901] Trial 495 finished with value: 0.012023138657767008
and parameters: {'learning_rate': 0.4622710807855453, 'max_depth': 10,
'n_estimators': 163, 'reg_lambda': 0.27969621504404946, 'subsample':
0.880263817968237}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:36,167] Trial 496 finished with value: 0.010737983532783223
and parameters: {'learning_rate': 0.4650703873604312, 'max_depth': 10,
'n_estimators': 162, 'reg_lambda': 0.2767983131236919, 'subsample':
0.8804535143681999}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:36,431] Trial 497 finished with value: 0.008391483420258732
and parameters: {'learning_rate': 0.4668389753315168, 'max_depth': 10,
'n_estimators': 161, 'reg_lambda': 0.2750606839545833, 'subsample':
0.8801872021607932}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:36,693] Trial 498 finished with value: 0.008984452303588113
and parameters: {'learning_rate': 0.46326072705554827, 'max_depth': 10,
'n_estimators': 160, 'reg_lambda': 0.2787323570628813, 'subsample':
0.880435851937629}. Best is trial 410 with value: 0.007727098195204591.
[I 2024-08-30 19:44:36,948] Trial 499 finished with value: 0.009657957433267328
and parameters: {'learning_rate': 0.4707866160162773, 'max_depth': 10,
'n_estimators': 164, 'reg_lambda': 0.2798105838641423, 'subsample':
0.8803329576003063}. Best is trial 410 with value: 0.007727098195204591.

            i=1: {'learning_rate': 0.4669790251338014, 'max_depth': 10,
'n_estimators': 155, 'reg_lambda': 0.27959956779258466, 'subsample':
0.8805770870485977}
    MSE    i=1: 0.007727098195204591
[9284. 9035. 9152.] [8658.51590729 8273.83145905 8820.35414124] [0.07 0.08 0.04]
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[I 2024-08-30 19:44:37,307] A new study created in memory with name: no-name-
aef0225b-7da8-4489-beab-34d9d39d2e18
[I 2024-08-30 19:44:37,632] Trial 0 finished with value: 0.011389725163410946
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and parameters: {'learning_rate': 0.3462600690133338, 'max_depth': 9,
'n_estimators': 296, 'reg_lambda': 0.3908904095974114, 'subsample':
0.8835943224083366}. Best is trial 0 with value: 0.011389725163410946.
[I 2024-08-30 19:44:37,922] Trial 1 finished with value: 0.010074462637718716
and parameters: {'learning_rate': 0.342034998899315, 'max_depth': 11,
'n_estimators': 299, 'reg_lambda': 0.3774665404912943, 'subsample':
0.8811064062968346}. Best is trial 1 with value: 0.010074462637718716.
[I 2024-08-30 19:44:38,204] Trial 2 finished with value: 0.010629312803866524
and parameters: {'learning_rate': 0.30353766585416136, 'max_depth': 11,
'n_estimators': 241, 'reg_lambda': 0.3956283005444071, 'subsample':
0.8805072767313309}. Best is trial 1 with value: 0.010074462637718716.
[I 2024-08-30 19:44:38,468] Trial 3 finished with value: 0.009903622341058165
and parameters: {'learning_rate': 0.33080897189161795, 'max_depth': 10,
'n_estimators': 275, 'reg_lambda': 0.38662095098837007, 'subsample':
0.8810941284417259}. Best is trial 3 with value: 0.009903622341058165.
[I 2024-08-30 19:44:38,763] Trial 4 finished with value: 0.010232476957850812
and parameters: {'learning_rate': 0.3319421041461369, 'max_depth': 9,
'n_estimators': 292, 'reg_lambda': 0.32842569159111756, 'subsample':
0.8821341661710208}. Best is trial 3 with value: 0.009903622341058165.
[I 2024-08-30 19:44:39,031] Trial 5 finished with value: 0.009722331177489555
and parameters: {'learning_rate': 0.33315389688949065, 'max_depth': 10,
'n_estimators': 281, 'reg_lambda': 0.36648714510756203, 'subsample':
0.883531822069885}. Best is trial 5 with value: 0.009722331177489555.
[I 2024-08-30 19:44:39,296] Trial 6 finished with value: 0.009067051312544816
and parameters: {'learning_rate': 0.3238357737037668, 'max_depth': 10,
'n_estimators': 268, 'reg_lambda': 0.3305072610364454, 'subsample':
0.8816138493910347}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:39,580] Trial 7 finished with value: 0.011680056807413661
and parameters: {'learning_rate': 0.33303978434700066, 'max_depth': 11,
'n_estimators': 302, 'reg_lambda': 0.32496367098867174, 'subsample':
0.8846173609245079}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:39,848] Trial 8 finished with value: 0.01046784347581298 and
parameters: {'learning_rate': 0.30199165194374344, 'max_depth': 10,
'n_estimators': 249, 'reg_lambda': 0.3670269604993226, 'subsample':
0.8850116324236711}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:40,133] Trial 9 finished with value: 0.011032436168320017
and parameters: {'learning_rate': 0.33445967444172386, 'max_depth': 9,
'n_estimators': 295, 'reg_lambda': 0.3256466589946967, 'subsample':
0.8834568241229099}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:40,443] Trial 10 finished with value: 0.01000193495389686
and parameters: {'learning_rate': 0.3162927102831096, 'max_depth': 10,
'n_estimators': 260, 'reg_lambda': 0.3460332428801318, 'subsample':
0.8822204441350927}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:40,755] Trial 11 finished with value: 0.010208900070816138
and parameters: {'learning_rate': 0.3187454175841439, 'max_depth': 10,
'n_estimators': 275, 'reg_lambda': 0.3509592050946245, 'subsample':
0.8825146780636302}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:41,067] Trial 12 finished with value: 0.009081692093510415
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and parameters: {'learning_rate': 0.32177478941613086, 'max_depth': 10,
'n_estimators': 263, 'reg_lambda': 0.3620166976034384, 'subsample':
0.8843651503956483}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:41,387] Trial 13 finished with value: 0.009942057714258566
and parameters: {'learning_rate': 0.3195696445648937, 'max_depth': 10,
'n_estimators': 262, 'reg_lambda': 0.3391783065178074, 'subsample':
0.8859137182668677}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:41,818] Trial 14 finished with value: 0.01118356830690527
and parameters: {'learning_rate': 0.31137186127370087, 'max_depth': 11,
'n_estimators': 263, 'reg_lambda': 0.3605143882131411, 'subsample':
0.884466989945484}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:43,012] Trial 15 finished with value: 0.009777509601921263
and parameters: {'learning_rate': 0.32641189957260675, 'max_depth': 9,
'n_estimators': 253, 'reg_lambda': 0.34960989502867706, 'subsample':
0.8813684097417134}. Best is trial 6 with value: 0.009067051312544816.
[I 2024-08-30 19:44:44,793] Trial 16 finished with value: 0.009040789746501795
and parameters: {'learning_rate': 0.3242775862654564, 'max_depth': 10,
'n_estimators': 283, 'reg_lambda': 0.33708900921955276, 'subsample':
0.8854610012786853}. Best is trial 16 with value: 0.009040789746501795.
[I 2024-08-30 19:44:46,451] Trial 17 finished with value: 0.010362625701375422
and parameters: {'learning_rate': 0.3122067941598785, 'max_depth': 11,
'n_estimators': 286, 'reg_lambda': 0.3367893169059631, 'subsample':
0.8857705130473695}. Best is trial 16 with value: 0.009040789746501795.
[I 2024-08-30 19:44:46,770] Trial 18 finished with value: 0.008301945258955166
and parameters: {'learning_rate': 0.3258368817558752, 'max_depth': 9,
'n_estimators': 309, 'reg_lambda': 0.3200419061322267, 'subsample':
0.8801139806710703}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:47,111] Trial 19 finished with value: 0.010472056364237764
and parameters: {'learning_rate': 0.33980637093973726, 'max_depth': 9,
'n_estimators': 309, 'reg_lambda': 0.3205439374076403, 'subsample':
0.8804805194853322}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:47,442] Trial 20 finished with value: 0.01033927789823026
and parameters: {'learning_rate': 0.3262321398705447, 'max_depth': 9,
'n_estimators': 286, 'reg_lambda': 0.3382902222122721, 'subsample':
0.8853436338531151}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:47,752] Trial 21 finished with value: 0.00929807037224352
and parameters: {'learning_rate': 0.3243672522668036, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.33293541260712595, 'subsample':
0.880097988230339}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:48,085] Trial 22 finished with value: 0.010109834587668029
and parameters: {'learning_rate': 0.3138230889753769, 'max_depth': 9,
'n_estimators': 307, 'reg_lambda': 0.33044410999816115, 'subsample':
0.8817179775593117}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:48,401] Trial 23 finished with value: 0.009726462510365123
and parameters: {'learning_rate': 0.3256683185252152, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.3211941233504339, 'subsample':
0.8828760645226634}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:48,724] Trial 24 finished with value: 0.010385063948237084

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and parameters: {'learning_rate': 0.32895124463659287, 'max_depth': 9,
'n_estimators': 282, 'reg_lambda': 0.34395715017197614, 'subsample':
0.8800357720452283}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:49,083] Trial 25 finished with value: 0.010924848729642715
and parameters: {'learning_rate': 0.30846503155726773, 'max_depth': 10,
'n_estimators': 256, 'reg_lambda': 0.35450797549340257, 'subsample':
0.8817200562970215}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:49,410] Trial 26 finished with value: 0.009694712997619875
and parameters: {'learning_rate': 0.337442746499361, 'max_depth': 11,
'n_estimators': 290, 'reg_lambda': 0.33353525308423226, 'subsample':
0.8806412601175196}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:49,721] Trial 27 finished with value: 0.010175659592752602
and parameters: {'learning_rate': 0.3211600588901492, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.34252780824488466, 'subsample':
0.8830424338334136}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:50,068] Trial 28 finished with value: 0.009863160530276414
and parameters: {'learning_rate': 0.32272092087584237, 'max_depth': 9,
'n_estimators': 304, 'reg_lambda': 0.32605943009362337, 'subsample':
0.8840585189736688}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:50,384] Trial 29 finished with value: 0.01012828316852603
and parameters: {'learning_rate': 0.34759737305996896, 'max_depth': 10,
'n_estimators': 278, 'reg_lambda': 0.3202959892916571, 'subsample':
0.8808226820028238}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:50,716] Trial 30 finished with value: 0.010533962713189644
and parameters: {'learning_rate': 0.31727461568675847, 'max_depth': 9,
'n_estimators': 267, 'reg_lambda': 0.33364087602484743, 'subsample':
0.8817056660510544}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:51,046] Trial 31 finished with value: 0.010362841862494617
and parameters: {'learning_rate': 0.3290730193910786, 'max_depth': 10,
'n_estimators': 247, 'reg_lambda': 0.3746218733360699, 'subsample':
0.8840499505690667}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:51,405] Trial 32 finished with value: 0.008999983453787526
and parameters: {'learning_rate': 0.32209874290559104, 'max_depth': 10,
'n_estimators': 265, 'reg_lambda': 0.3756862230379807, 'subsample':
0.8851863741398618}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:51,713] Trial 33 finished with value: 0.010419678536235478
and parameters: {'learning_rate': 0.3441105529882529, 'max_depth': 11,
'n_estimators': 299, 'reg_lambda': 0.38378581151354674, 'subsample':
0.8853492955397508}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:52,020] Trial 34 finished with value: 0.009642353341397366
and parameters: {'learning_rate': 0.3281607909643116, 'max_depth': 10,
'n_estimators': 255, 'reg_lambda': 0.3969924779158141 6, 'subsample':
0.8850672296425746}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:52,384] Trial 35 finished with value: 0.009461310601712798
and parameters: {'learning_rate': 0.3234181056481238, 'max_depth': 10,
'n_estimators': 241, 'reg_lambda': 0.3785747321668627, 'subsample':
0.8811890427864967}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:52,706] Trial 36 finished with value: 0.011076322537283436
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and parameters: {'learning_rate': 0.30760624255836594, 'max_depth': 11,
'n_estimators': 266, 'reg_lambda': 0.37442806545187396, 'subsample':
0.8856468961722124}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:53,015] Trial 37 finished with value: 0.010211638028352421
and parameters: {'learning_rate': 0.33579448674587375, 'max_depth': 10,
'n_estimators': 274, 'reg_lambda': 0.38779091047868114, 'subsample':
0.8831658758305985}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:53,356] Trial 38 finished with value: 0.009902276290291044
and parameters: {'learning_rate': 0.3311486666432673, 'max_depth': 10,
'n_estimators': 280, 'reg_lambda': 0.3696618292343716, 'subsample':
0.8847571457607312}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:53,662] Trial 39 finished with value: 0.010312036361100067
and parameters: {'learning_rate': 0.3163498338016486, 'max_depth': 9,
'n_estimators': 258, 'reg_lambda': 0.32888321787905717, 'subsample':
0.882595043879471}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:54,029] Trial 40 finished with value: 0.010554523599580862
and parameters: {'learning_rate': 0.3201501296991224, 'max_depth': 11,
'n_estimators': 290, 'reg_lambda': 0.35524679068644954, 'subsample':
0.8839500034256721}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:54,371] Trial 41 finished with value: 0.0085705844858697 and
parameters: {'learning_rate': 0.32248395862866586, 'max_depth': 10,
'n_estimators': 262, 'reg_lambda': 0.3595009467896197, 'subsample':
0.884317002464287}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:54,657] Trial 42 finished with value: 0.010373616746307166
and parameters: {'learning_rate': 0.3240404672489333, 'max_depth': 10,
'n_estimators': 251, 'reg_lambda': 0.38092522101873594, 'subsample':
0.8848988722053491}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:54,950] Trial 43 finished with value: 0.009862713880524253
and parameters: {'learning_rate': 0.3291340758973005, 'max_depth': 10,
'n_estimators': 259, 'reg_lambda': 0.3247629482768354, 'subsample':
0.8853514971013327}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:55,298] Trial 44 finished with value: 0.01024543393479031
and parameters: {'learning_rate': 0.3179532428624449, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.39373496692159643, 'subsample':
0.8856079635298459}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:55,604] Trial 45 finished with value: 0.010338464692935118
and parameters: {'learning_rate': 0.3152021280681593, 'max_depth': 10,
'n_estimators': 266, 'reg_lambda': 0.3657675898425279, 'subsample':
0.884314348672362}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:55,905] Trial 46 finished with value: 0.011091713221310029
and parameters: {'learning_rate': 0.32127057793635355, 'max_depth': 10,
'n_estimators': 276, 'reg_lambda': 0.3553563111833145, 'subsample':
0.883648102817771}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:56,219] Trial 47 finished with value: 0.009325172948918985
and parameters: {'learning_rate': 0.33343668071141874, 'max_depth': 10,
'n_estimators': 245, 'reg_lambda': 0.347501637465245, 'subsample':
0.8851615916964943}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:57,198] Trial 48 finished with value: 0.011214920454628989

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and parameters: {'learning_rate': 0.32687729353321215, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3699433103123517, 'subsample':
0.8859794246446921}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:58,492] Trial 49 finished with value: 0.010043407065887912
and parameters: {'learning_rate': 0.31957435618500507, 'max_depth': 9,
'n_estimators': 262, 'reg_lambda': 0.34101466368285793, 'subsample':
0.8820609169525858}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:44:59,433] Trial 50 finished with value: 0.01060197332853692
and parameters: {'learning_rate': 0.331343194577021, 'max_depth': 10,
'n_estimators': 284, 'reg_lambda': 0.3237014321694096, 'subsample':
0.8846791451510113}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:01,335] Trial 51 finished with value: 0.009718977327060728
and parameters: {'learning_rate': 0.3207723946317171, 'max_depth': 10,
'n_estimators': 264, 'reg_lambda': 0.36018793134901905, 'subsample':
0.884479133646382}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:01,663] Trial 52 finished with value: 0.009842466243582483
and parameters: {'learning_rate': 0.32318481351526873, 'max_depth': 10,
'n_estimators': 261, 'reg_lambda': 0.3631369997157617, 'subsample':
0.8837717468046815}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:01,988] Trial 53 finished with value: 0.00917313732444319
and parameters: {'learning_rate': 0.3254704348967495, 'max_depth': 10,
'n_estimators': 265, 'reg_lambda': 0.33720045621606837, 'subsample':
0.884805491103999}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:02,309] Trial 54 finished with value: 0.009199218594167568
and parameters: {'learning_rate': 0.32230786081035795, 'max_depth': 10,
'n_estimators': 258, 'reg_lambda': 0.3514946403937167, 'subsample':
0.8843350219406589}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:02,657] Trial 55 finished with value: 0.01045185838744977
and parameters: {'learning_rate': 0.32768146187645325, 'max_depth': 11,
'n_estimators': 268, 'reg_lambda': 0.37287723549452423, 'subsample':
0.8803790059621887}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:02,990] Trial 56 finished with value: 0.010061296794118511
and parameters: {'learning_rate': 0.3138134389862586, 'max_depth': 10,
'n_estimators': 254, 'reg_lambda': 0.3639433739109389, 'subsample':
0.8834514610926988}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:03,337] Trial 57 finished with value: 0.010038868831634762
and parameters: {'learning_rate': 0.3185222052416977, 'max_depth': 9,
'n_estimators': 273, 'reg_lambda': 0.32986062333842625, 'subsample':
0.8854616849652096}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:03,707] Trial 58 finished with value: 0.009130523105705324
and parameters: {'learning_rate': 0.3249381201760468, 'max_depth': 10,
'n_estimators': 277, 'reg_lambda': 0.3349952296018929, 'subsample':
0.8851954786477675}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:04,033] Trial 59 finished with value: 0.00909522237675669
and parameters: {'learning_rate': 0.3221274113192449, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.35844817687033087, 'subsample':
0.8809653502568472}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:04,390] Trial 60 finished with value: 0.010425926419793435
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and parameters: {'learning_rate': 0.32957962378423855, 'max_depth': 9,
'n_estimators': 310, 'reg_lambda': 0.38872069247902297, 'subsample':
0.8825734820230254}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:04,751] Trial 61 finished with value: 0.00944457999584927
and parameters: {'learning_rate': 0.32205262472643853, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.35626415913966636, 'subsample':
0.8808581912365678}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:05,092] Trial 62 finished with value: 0.008695629480372457
and parameters: {'learning_rate': 0.32482217787072865, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.36221587638591196, 'subsample':
0.8802475008821454}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:05,434] Trial 63 finished with value: 0.009734703953681633
and parameters: {'learning_rate': 0.326235323928589, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3688892068124129, 'subsample':
0.8802779714243218}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:05,771] Trial 64 finished with value: 0.01012209548226742
and parameters: {'learning_rate': 0.32450446297650687, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.35186714246370543, 'subsample':
0.8813934265099825}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:06,088] Trial 65 finished with value: 0.010136807635563818
and parameters: {'learning_rate': 0.3191473619902254, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.34438644974682736, 'subsample':
0.880204386920105}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:06,422] Trial 66 finished with value: 0.009520309587277136
and parameters: {'learning_rate': 0.32748157696464014, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.32698213067634546, 'subsample':
0.8805313906397246}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:06,763] Trial 67 finished with value: 0.009171023632671487
and parameters: {'learning_rate': 0.3240187656194502, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.33150862871819053, 'subsample':
0.883296463588823}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:07,083] Trial 68 finished with value: 0.009869391608475706
and parameters: {'learning_rate': 0.3169767663464154, 'max_depth': 10,
'n_estimators': 263, 'reg_lambda': 0.36250425611011405, 'subsample':
0.8806341489898342}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:07,424] Trial 69 finished with value: 0.0089667946638996 and
parameters: {'learning_rate': 0.3305287645873141, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.3479042500843448, 'subsample':
0.8857501007851529}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:07,748] Trial 70 finished with value: 0.011239783955864583
and parameters: {'learning_rate': 0.3333466086267697, 'max_depth': 9,
'n_estimators': 305, 'reg_lambda': 0.34081557129731743, 'subsample':
0.8857915284722719}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:08,054] Trial 71 finished with value: 0.00980255579953928
and parameters: {'learning_rate': 0.32993670926753066, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35009645811620516, 'subsample':
0.8855481385743685}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:08,396] Trial 72 finished with value: 0.009301484829165964

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and parameters: {'learning_rate': 0.32542867430652883, 'max_depth': 10,
'n_estimators': 307, 'reg_lambda': 0.34701263564648643, 'subsample':
0.8800066787670385}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:08,716] Trial 73 finished with value: 0.009500994378090299
and parameters: {'learning_rate': 0.33197512114108424, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3578107357773905, 'subsample':
0.8858034325238046}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:09,044] Trial 74 finished with value: 0.008814635059902867
and parameters: {'learning_rate': 0.3279756718935968, 'max_depth': 10,
'n_estimators': 309, 'reg_lambda': 0.33587394887526895, 'subsample':
0.8849644536690249}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:09,357] Trial 75 finished with value: 0.010164704814270939
and parameters: {'learning_rate': 0.3368565222126668, 'max_depth': 10,
'n_estimators': 310, 'reg_lambda': 0.33493913210731846, 'subsample':
0.8848913611452667}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:09,671] Trial 76 finished with value: 0.009317558736716 86
and parameters: {'learning_rate': 0.3003906799037918, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.3316905219378486, 'subsample':
0.8850634456880259}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:10,002] Trial 77 finished with value: 0.009367297280289044
and parameters: {'learning_rate': 0.3276492165822266, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.33995338782089, 'subsample':
0.8852066698620326}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:10,321] Trial 78 finished with value: 0.008350794560917262
and parameters: {'learning_rate': 0.335302736614062, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.32197068743233204, 'subsample':
0.8822694582439505}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:10,617] Trial 79 finished with value: 0.010865491630872281
and parameters: {'learning_rate': 0.3395591746274299, 'max_depth': 11,
'n_estimators': 295, 'reg_lambda': 0.32001843784981693, 'subsample':
0.8854138950973098}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:10,939] Trial 80 finished with value: 0.009752016101607421
and parameters: {'learning_rate': 0.3341662613140865, 'max_depth': 10,
'n_estimators': 289, 'reg_lambda': 0.3272122211099834, 'subsample':
0.8845710525580139}. Best is trial 18 with value: 0.008301945258955166.
[I 2024-08-30 19:45:11,278] Trial 81 finished with value: 0.008204941926824779
and parameters: {'learning_rate': 0.33522307852767924, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.32192264204640436, 'subsample':
0.8823004529798353}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:12,283] Trial 82 finished with value: 0.010049514417176 76
and parameters: {'learning_rate': 0.33546510710640964, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.3229764860356305, 'subsample':
0.8820111566858683}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:13,631] Trial 83 finished with value: 0.009469152166851 37
and parameters: {'learning_rate': 0.34046442332731014, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.32277789190119743, 'subsample':
0.8827480706075839}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:14,831] Trial 84 finished with value: 0.009194419322467817
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and parameters: {'learning_rate': 0.33210093984727723, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3248724693877681, 'subsample':
0.8814484977070398}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:16,536] Trial 85 finished with value: 0.009816676628066982
and parameters: {'learning_rate': 0.3384002857851427, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.3221942914076849, 'subsample':
0.8856830507275812}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:16,855] Trial 86 finished with value: 0.008608466742945336
and parameters: {'learning_rate': 0.33008895819997075, 'max_depth': 10,
'n_estimators': 309, 'reg_lambda': 0.344306010722584, 'subsample':
0.8823592225118562}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:17,211] Trial 87 finished with value: 0.0099224057299419 and
parameters: {'learning_rate': 0.34361686350257753, 'max_depth': 10,
'n_estimators': 309, 'reg_lambda': 0.34425629775650357, 'subsample':
0.8823280499748609}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:17,530] Trial 88 finished with value: 0.009482203631371089
and parameters: {'learning_rate': 0.3302648248061131, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.32824545839752467, 'subsample':
0.8822953800750973}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:17,839] Trial 89 finished with value: 0.008505893582903068
and parameters: {'learning_rate': 0.3349434472646937, 'max_depth': 10,
'n_estimators': 310, 'reg_lambda': 0.35336914120239443, 'subsample':
0.8819866064409532}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:18,141] Trial 90 finished with value: 0.008523367958927714
and parameters: {'learning_rate': 0.3322044997155158, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.34793637916276854, 'subsample':
0.8819182445164085}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:18,468] Trial 91 finished with value: 0.01004376671043224
and parameters: {'learning_rate': 0.3353757292932724, 'max_depth': 10,
'n_estimators': 310, 'reg_lambda': 0.3488118337819305, 'subsample':
0.8819110346060008}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:18,800] Trial 92 finished with value: 0.008981482180845672
and parameters: {'learning_rate': 0.3325268296678237, 'max_depth': 10,
'n_estimators': 307, 'reg_lambda': 0.35197353475460513, 'subsample':
0.8824217436627289}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:19,109] Trial 93 finished with value: 0.00830849692523548
and parameters: {'learning_rate': 0.3343929283113967, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.35312663848405434, 'subsample':
0.8818672977035998}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:19,479] Trial 94 finished with value: 0.008826079398805985
and parameters: {'learning_rate': 0.33711521306319653, 'max_depth': 10,
'n_estimators': 308, 'reg_lambda': 0.35402535913349575, 'subsample':
0.8819382510307129}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:19,790] Trial 95 finished with value: 0.009749174534448419
and parameters: {'learning_rate': 0.33818219151604423, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.3536416878260319, 'subsample':
0.8817850350021069}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:20,118] Trial 96 finished with value: 0.008439668210517835

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and parameters: {'learning_rate': 0.33387912272834086, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3586428869312936, 'subsample':
0.8821712843718559}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:20,485] Trial 97 finished with value: 0.009171548914090161
and parameters: {'learning_rate': 0.33635272143191935, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.36116580607249643, 'subsample':
0.8828371155787043}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:20,817] Trial 98 finished with value: 0.00821210433172045
and parameters: {'learning_rate': 0.33474990066065724, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.3568404183910162, 'subsample':
0.8822072004777222}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:21,199] Trial 99 finished with value: 0.008334963482244096
and parameters: {'learning_rate': 0.3341758183682816, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3590308652142751, 'subsample':
0.8821614029456794}. Best is trial 81 with value: 0.008204941926824779.
[I 2024-08-30 19:45:21,571] Trial 100 finished with value: 0.00808794167109523
and parameters: {'learning_rate': 0.3344207570553854, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35794692225727165, 'subsample':
0.8821836515115311}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:21,897] Trial 101 finished with value: 0.008278823879412091
and parameters: {'learning_rate': 0.3344493969178632, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3589428728261893, 'subsample':
0.8815609414980512}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:22,241] Trial 102 finished with value: 0.00832804152311274
and parameters: {'learning_rate': 0.33479812566235656, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35770485814550834, 'subsample':
0.8822135873364424}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:22,606] Trial 103 finished with value: 0.008130578022933654
and parameters: {'learning_rate': 0.3346274346858254, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.356881897231074, 'subsample':
0.8821584068267263}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:22,924] Trial 104 finished with value: 0.008244646854965548
and parameters: {'learning_rate': 0.33433038517585695, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35873862180294763, 'subsample':
0.8821981260998442}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:23,253] Trial 105 finished with value: 0.008730334128674829
and parameters: {'learning_rate': 0.3389575599868113, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3567185225004828, 'subsample':
0.8815233257378223}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:23,606] Trial 106 finished with value: 0.009410660099000935
and parameters: {'learning_rate': 0.34060378204487396, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36425416428513124, 'subsample':
0.8812338474921192}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:23,907] Trial 107 finished with value: 0.00927262134236322
and parameters: {'learning_rate': 0.34996503806144935, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.3998797988939281, 'subsample':
0.8821449307722619}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:24,308] Trial 108 finished with value: 0.01021477479932068
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and parameters: {'learning_rate': 0.3346110386328636, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.36634498793163256, 'subsample':
0.8816289347462954}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:24,632] Trial 109 finished with value: 0.009672756050727826
and parameters: {'learning_rate': 0.34205318207298635, 'max_depth': 10,
'n_estimators': 288, 'reg_lambda': 0.3601882766140455, 'subsample':
0.8825033031182029}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:24,940] Trial 110 finished with value: 0.00813379620970845
and parameters: {'learning_rate': 0.3365248438734967, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3557520953348749, 'subsample':
0.8826329735155879}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:25,262] Trial 111 finished with value: 0.0087310331390778
and parameters: {'learning_rate': 0.33620067714707336, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.35751845854982567, 'subsample':
0.8818171055686691}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:25,602] Trial 112 finished with value: 0.00811290069965428
and parameters: {'learning_rate': 0.3372876309299034, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35643573017694874, 'subsample':
0.8826885868596097}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:25,901] Trial 113 finished with value: 0.010389875566310896
and parameters: {'learning_rate': 0.33814164810766256, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3547941322675749, 'subsample':
0.883034324529887}. Best is trial 100 with value: 0.00808794167109523.
[I 2024-08-30 19:45:26,222] Trial 114 finished with value: 0.007785858953551818
and parameters: {'learning_rate': 0.3331478517803165, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35641144370811756, 'subsample':
0.8826297708501412}. Best is trial 114 with value: 0.007785858953551818.
[I 2024-08-30 19:45:26,839] Trial 115 finished with value: 0.00847988030676922
and parameters: {'learning_rate': 0.33724648352300024, 'max_depth': 10,
'n_estimators': 287, 'reg_lambda': 0.3570510449309206, 'subsample':
0.8827544775097125}. Best is trial 114 with value: 0.007785858953551818.
[I 2024-08-30 19:45:28,148] Trial 116 finished with value: 0.007457662146701997
and parameters: {'learning_rate': 0.33285116110425184, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.36128463382297626, 'subsample':
0.8826709041464401}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:29,595] Trial 117 finished with value: 0.009933215944716554
and parameters: {'learning_rate': 0.33319937469572297, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.3651504027658488, 'subsample':
0.8826176129648623}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:31,245] Trial 118 finished with value: 0.009987453131523952
and parameters: {'learning_rate': 0.336210930939796, 'max_depth': 9,
'n_estimators': 296, 'reg_lambda': 0.361639765563794, 'subsample':
0.883166360012443}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:31,551] Trial 119 finished with value: 0.009098784937476912
and parameters: {'learning_rate': 0.3311848327485887, 'max_depth': 10,
'n_estimators': 290, 'reg_lambda': 0.3556213910115821, 'subsample':
0.8824513888789058}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:31,891] Trial 120 finished with value: 0.008913550901605 and

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parameters: {'learning_rate': 0.3328108332444012, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3675320810493242, 'subsample':
0.8827197087179984}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:32,202] Trial 121 finished with value: 0.007461530232040043
and parameters: {'learning_rate': 0.3345146249875963, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35271541688894825, 'subsample':
0.882925510705}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:32,529] Trial 122 finished with value: 0.008806169548449655
and parameters: {'learning_rate': 0.3371352500898763, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3526242058130326, 'subsample':
0.882915814157892}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:32,872] Trial 123 finished with value: 0.00806684512545848
and parameters: {'learning_rate': 0.33335171104130257, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36032211654820984, 'subsample':
0.882690466260339}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:33,202] Trial 124 finished with value: 0.007728364304496353
and parameters: {'learning_rate': 0.3330105218978936, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3610714771240316, 'subsample':
0.8825900181278973}. Best is trial 116 with value: 0.007457662146701997.
[I 2024-08-30 19:45:33,530] Trial 125 finished with value: 0.0074300559646928045
and parameters: {'learning_rate': 0.33356812166278427, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36040102714121314, 'subsample':
0.8826448323149595}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:33,924] Trial 126 finished with value: 0.007857280345191071
and parameters: {'learning_rate': 0.33332779711348126, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36084842896668795, 'subsample':
0.8826094666650991}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:34,280] Trial 127 finished with value: 0.00938157130614387
and parameters: {'learning_rate': 0.33167598606101795, 'max_depth': 10,
'n_estimators': 285, 'reg_lambda': 0.3629796326003222, 'subsample':
0.8825938791301552}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:34,599] Trial 128 finished with value: 0.008236019081348512
and parameters: {'learning_rate': 0.3330974175340106, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36008099269234084, 'subsample':
0.8829069135015061}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:34,963] Trial 129 finished with value: 0.009656475210869262
and parameters: {'learning_rate': 0.32873352642777537, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.36117553868175817, 'subsample':
0.883171077969475}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:35,297] Trial 130 finished with value: 0.008616192687751352
and parameters: {'learning_rate': 0.33111136695597637, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3712912130343, 'subsample':
0.8826423550816135}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:35,628] Trial 131 finished with value: 0.008282341659532611
and parameters: {'learning_rate': 0.3335435298446589, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36422690568515165, 'subsample':
0.8828726499393706}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:35,981] Trial 132 finished with value: 0.010561410754403072
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and parameters: {'learning_rate': 0.3356012578176748, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3566071907681421, 'subsample':
0.883010921317816}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:36,320] Trial 133 finished with value: 0.007929960328698846
and parameters: {'learning_rate': 0.332680102651112, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3604444415721427, 'subsample':
0.8824524331918658}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:36,698] Trial 134 finished with value: 0.00936950403496273
and parameters: {'learning_rate': 0.33236403642307855, 'max_depth': 10,
'n_estimators': 290, 'reg_lambda': 0.3505674919866646, 'subsample':
0.882481226948678}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:37,083] Trial 135 finished with value: 0.008748252458850048
and parameters: {'learning_rate': 0.3361525425546475, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3549883366083645, 'subsample':
0.8827310670889708}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:37,429] Trial 136 finished with value: 0.009492515069998932
and parameters: {'learning_rate': 0.3333010106177904, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36259515443249957, 'subsample':
0.882414907987427}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:37,738] Trial 137 finished with value: 0.008069524117715153
and parameters: {'learning_rate': 0.33953388700683795, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.3605042945330042, 'subsample':
0.8826752807174688}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:38,071] Trial 138 finished with value: 0.008222918714231326
and parameters: {'learning_rate': 0.3412917841434647, 'max_depth': 10,
'n_estimators': 289, 'reg_lambda': 0.36111102390912675, 'subsample':
0.882540404320152}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:38,384] Trial 139 finished with value: 0.009594836758320584
and parameters: {'learning_rate': 0.3393914958394277, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.3650724485321156, 'subsample':
0.8833921493986613}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:38,681] Trial 140 finished with value: 0.008548787863705064
and parameters: {'learning_rate': 0.3377636907977563, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36767460285257003, 'subsample':
0.8826901148605236}. Best is trial 125 with value: 0.0074300559646928045.
[I 2024-08-30 19:45:38,990] Trial 141 finished with value: 0.0068689141134665585
and parameters: {'learning_rate': 0.3355511714181811, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3596915957073452, 'subsample':
0.8823254807496489}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:39,323] Trial 142 finished with value: 0.007219569931277215
and parameters: {'learning_rate': 0.3357483713773889, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.359180114711662, 'subsample':
0.8823278630004607}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:39,627] Trial 143 finished with value: 0.00833911276424367
and parameters: {'learning_rate': 0.33864485197558436, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3597184251682676, 'subsample':
0.8823790387786367}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:39,924] Trial 144 finished with value: 0.00925586718389196

and parameters: {'learning_rate': 0.33681969177371207, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3555127514738947, 'subsample':
0.8827819477877927}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:40,248] Trial 145 finished with value: 0.008807728965869543
and parameters: {'learning_rate': 0.3314085983957849, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.36252243117662813, 'subsample':
0.8829485165139482}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:40,564] Trial 146 finished with value: 0.008605815664199884
and parameters: {'learning_rate': 0.33604189339298046, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3602095292254014, 'subsample':
0.8820477830876776}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:40,863] Trial 147 finished with value: 0.008614814519006093
and parameters: {'learning_rate': 0.34328658836171155, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35828803187014746, 'subsample':
0.8825472376824528}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:41,289] Trial 148 finished with value: 0.010418878687608756
and parameters: {'learning_rate': 0.33252372413606607, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.35418389425315727, 'subsample':
0.8831167426886665}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:42,485] Trial 149 finished with value: 0.009754902413598339
and parameters: {'learning_rate': 0.337392732456729, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36329337591431116, 'subsample':
0.8826738500755127}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:43,924] Trial 150 finished with value: 0.008291155366563224
and parameters: {'learning_rate': 0.3307061606548144, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.35656758749794176, 'subsample':
0.8823809918068165}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:45,918] Trial 151 finished with value: 0.007112035397132755
and parameters: {'learning_rate': 0.3353812906079648, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36159364500219804, 'subsample':
0.8822993965734403}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:46,225] Trial 152 finished with value: 0.0072333237912775225
and parameters: {'learning_rate': 0.33405402505657816, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3604804553783866, 'subsample':
0.8827928586200352}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:46,554] Trial 153 finished with value: 0.0077799648477357595
and parameters: {'learning_rate': 0.33405587648705587, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3609357267120406, 'subsample':
0.8825080871618162}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:46,865] Trial 154 finished with value: 0.008064988418644505
and parameters: {'learning_rate': 0.33323424413048247, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36089158354625783, 'subsample':
0.8828596856369084}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:47,180] Trial 155 finished with value: 0.009547543708687035
and parameters: {'learning_rate': 0.3336920086846073, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3660311933306285, 'subsample':
0.8824890128544095}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:47,522] Trial 156 finished with value: 0.008152806396327093

and parameters: {'learning_rate': 0.3320572062898399, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3611671291336705, 'subsample':
0.8828567995297493}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:47,846] Trial 157 finished with value: 0.009144569597773546
and parameters: {'learning_rate': 0.33336271609076107, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36418972309063397, 'subsample':
0.8832753284437127}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:48,173] Trial 158 finished with value: 0.009082977924972568
and parameters: {'learning_rate': 0.32953772981526985, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.3594141292161677, 'subsample':
0.8823090690722437}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:48,518] Trial 159 finished with value: 0.011583018575927626
and parameters: {'learning_rate': 0.3456329082500979, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3616124752010387, 'subsample':
0.883065599951294}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:48,840] Trial 160 finished with value: 0.008724765975589148
and parameters: {'learning_rate': 0.3352236024689347, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36346116797151085, 'subsample':
0.8828028939848657}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:49,151] Trial 161 finished with value: 0.007298882200253944
and parameters: {'learning_rate': 0.333907329147252, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3603228156889777, 'subsample':
0.8824975518453548}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:49,493] Trial 162 finished with value: 0.0072042237198254675
and parameters: {'learning_rate': 0.33386433476326816, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3591559851333259, 'subsample':
0.8824970230115603}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:49,802] Trial 163 finished with value: 0.008398479145542575
and parameters: {'learning_rate': 0.33264774779919987, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.36010905027895584, 'subsample':
0.8825375280145298}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:50,128] Trial 164 finished with value: 0.0083772937059221
and parameters: {'learning_rate': 0.330677049615145, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.36202842878344355, 'subsample':
0.882398330187121}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:50,434] Trial 165 finished with value: 0.008035930656290559
and parameters: {'learning_rate': 0.33399744016006616, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3592808839122854, 'subsample':
0.8829490279985446}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:50,774] Trial 166 finished with value: 0.007989082772453679
and parameters: {'learning_rate': 0.33387362517205327, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.358836595288768, 'subsample':
0.8829439638170061}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:51,097] Trial 167 finished with value: 0.007244892552072191
and parameters: {'learning_rate': 0.3340296619664439, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35862925016802294, 'subsample':
0.8829891756178684}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:51,422] Trial 168 finished with value: 0.010483338595499637

and parameters: {'learning_rate': 0.3353042657568597, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3581498774943486, 'subsample':
0.882962128715049}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:51,782] Trial 169 finished with value: 0.010197164218591964
and parameters: {'learning_rate': 0.33398462586188404, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3587370563150209, 'subsample':
0.8830298685413982}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:52,112] Trial 170 finished with value: 0.009991861908173475
and parameters: {'learning_rate': 0.3318247731293135, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.36524326453742384, 'subsample':
0.8832431538550363}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:52,443] Trial 171 finished with value: 0.008151008787874902
and parameters: {'learning_rate': 0.3339532021906836, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3621670386725423, 'subsample':
0.8828071449314461}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:52,775] Trial 172 finished with value: 0.009781866954126856
and parameters: {'learning_rate': 0.33542976230444604, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3582307389606349, 'subsample':
0.8828672908852936}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:53,087] Trial 173 finished with value: 0.009528982267636835
and parameters: {'learning_rate': 0.3327855240370526, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3632053499698501, 'subsample':
0.8825776724056641}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:53,402] Trial 174 finished with value: 0.008411246840382813
and parameters: {'learning_rate': 0.3317482379751291, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35925041351159565, 'subsample':
0.8824736902992849}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:53,743] Trial 175 finished with value: 0.007769355348699421
and parameters: {'learning_rate': 0.33407938473858345, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.360858718783183, 'subsample':
0.8829509622159125}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:54,067] Trial 176 finished with value: 0.006980990814538198
and parameters: {'learning_rate': 0.33582681666478564, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3616677278555451, 'subsample':
0.8823040270480441}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:54,449] Trial 177 finished with value: 0.008661674888422297
and parameters: {'learning_rate': 0.33595650595693577, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36735449249876156, 'subsample':
0.8822932579403442}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:54,788] Trial 178 finished with value: 0.009413817597438803
and parameters: {'learning_rate': 0.33495404675705037, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3638270060024315, 'subsample':
0.8824688824563174}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:55,119] Trial 179 finished with value: 0.009102120619152833
and parameters: {'learning_rate': 0.3363601390220948, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3619676518984987, 'subsample':
0.8820672739508583}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:55,437] Trial 180 finished with value: 0.008536492333414112

and parameters: {'learning_rate': 0.3347625000009402, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3571975785516811, 'subsample':
0.8823041300084091}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:55,772] Trial 181 finished with value: 0.007611240475924465
and parameters: {'learning_rate': 0.33381230620363306, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3595407116095009, 'subsample':
0.8825755569712564}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:56,716] Trial 182 finished with value: 0.008239569298642594
and parameters: {'learning_rate': 0.33251318248761097, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3608229366026689, 'subsample':
0.8825731007415952}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:58,151] Trial 183 finished with value: 0.008736276836042577
and parameters: {'learning_rate': 0.33417474823273413, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.35943769862841024, 'subsample':
0.8827548386185624}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:45:59,277] Trial 184 finished with value: 0.008549906128544945
and parameters: {'learning_rate': 0.33565011385166754, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35468280258339424, 'subsample':
0.8824188691286661}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:00,874] Trial 185 finished with value: 0.009941209539565591
and parameters: {'learning_rate': 0.333435685487014, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.36270598177689944, 'subsample':
0.8826565437629006}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:01,224] Trial 186 finished with value: 0.008198014514182424
and parameters: {'learning_rate': 0.3308766140988513, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35788475179899415, 'subsample':
0.8825383592268267}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:01,537] Trial 187 finished with value: 0.00850379920848041
and parameters: {'learning_rate': 0.33184410710681894, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.365203286610259, 'subsample':
0.8823157208591897}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:01,851] Trial 188 finished with value: 0.009610459496605616
and parameters: {'learning_rate': 0.3349806634131689, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3614492700064784, 'subsample':
0.8830867797403833}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:02,491] Trial 189 finished with value: 0.00864544437638727
and parameters: {'learning_rate': 0.33647427993322593, 'max_depth': 10,
'n_estimators': 279, 'reg_lambda': 0.35656218378983945, 'subsample':
0.8827950675604391}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:03,719] Trial 190 finished with value: 0.008467210713967182
and parameters: {'learning_rate': 0.3327106650153735, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3598883756038703, 'subsample':
0.8826169767333641}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:05,194] Trial 191 finished with value: 0.0074181704986816975
and parameters: {'learning_rate': 0.33417626115565, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3591626721165297, 'subsample':
0.8829633807588546}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:06,633] Trial 192 finished with value: 0.007715685052700083

and parameters: {'learning_rate': 0.3340705330322489, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3582895118550816, 'subsample':
0.8830059699090786}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:06,974] Trial 193 finished with value: 0.008201970441372837
and parameters: {'learning_rate': 0.3345965094583428, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36164876672992224, 'subsample':
0.883400104838721}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:07,335] Trial 194 finished with value: 0.009725743999778913
and parameters: {'learning_rate': 0.33565871083951, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36349820266361116, 'subsample':
0.8831479256100138}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:07,650] Trial 195 finished with value: 0.008511884653736155
and parameters: {'learning_rate': 0.33304242769335973, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3556078860610491, 'subsample':
0.8824138102020773}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:07,955] Trial 196 finished with value: 0.008352765631258124
and parameters: {'learning_rate': 0.337870670208316, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3524457004060049, 'subsample':
0.8827386934194619}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:08,281] Trial 197 finished with value: 0.008719907661044031
and parameters: {'learning_rate': 0.33410490721851205, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35770459169503627, 'subsample':
0.8821150959052133}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:08,667] Trial 198 finished with value: 0.009720673776355842
and parameters: {'learning_rate': 0.30644470778433697, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36014876520067485, 'subsample':
0.8822543452271104}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:09,038] Trial 199 finished with value: 0.009215864124135578
and parameters: {'learning_rate': 0.3318083557234586, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3644520615027793, 'subsample':
0.8825471537933496}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:09,380] Trial 200 finished with value: 0.008622561442727092
and parameters: {'learning_rate': 0.33653300076054854, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36090868224902584, 'subsample':
0.882655087792906}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:09,720] Trial 201 finished with value: 0.007806607018230234
and parameters: {'learning_rate': 0.3338213046911471, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35901390395765986, 'subsample':
0.8829484205774379}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:10,033] Trial 202 finished with value: 0.010450176419468526
and parameters: {'learning_rate': 0.33501746510781333, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3592192436602593, 'subsample':
0.882864571233697}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:10,370] Trial 203 finished with value: 0.008880534421519854
and parameters: {'learning_rate': 0.33336226363639043, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35751131534124975, 'subsample':
0.8830153347125516}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:10,707] Trial 204 finished with value: 0.007825126474952678

and parameters: {'learning_rate': 0.33398622703537323, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36219426598861165, 'subsample':
0.8827634958638939}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:11,927] Trial 205 finished with value: 0.008964760269178158
and parameters: {'learning_rate': 0.334302678670923, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3623607737678896, 'subsample':
0.8832585809722876}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:13,101] Trial 206 finished with value: 0.010663657955176663
and parameters: {'learning_rate': 0.33533540574919996, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35802782732636357, 'subsample':
0.8829433130001506}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:14,078] Trial 207 finished with value: 0.007363346606128461
and parameters: {'learning_rate': 0.3337444433500051, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3554277434566232, 'subsample':
0.8827911033621719}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:15,829] Trial 208 finished with value: 0.00898093328385658
and parameters: {'learning_rate': 0.33585619764820707, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35457401759573, 'subsample':
0.8827709164991436}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:16,159] Trial 209 finished with value: 0.009312210869104626
and parameters: {'learning_rate': 0.33412343156970686, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.35580970547151736, 'subsample':
0.8830865097623688}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:16,484] Trial 210 finished with value: 0.00982378796246358
and parameters: {'learning_rate': 0.33716409839638434, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35341166184929496, 'subsample':
0.8836223150167728}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:16,824] Trial 211 finished with value: 0.00836419186903762
and parameters: {'learning_rate': 0.3333328361015643, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35934116343993056, 'subsample':
0.8828276546460156}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:17,147] Trial 212 finished with value: 0.010446786154432855
and parameters: {'learning_rate': 0.33255271351091004, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3618232110766617, 'subsample':
0.882636205880682}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:17,479] Trial 213 finished with value: 0.008084235927764099
and parameters: {'learning_rate': 0.33475855172103935, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3568109190198561, 'subsample':
0.8829641217000784}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:17,821] Trial 214 finished with value: 0.007423760887241794
and parameters: {'learning_rate': 0.33371473069370544, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.35982739245218787, 'subsample':
0.8827743205420353}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:18,138] Trial 215 finished with value: 0.009759393130931621
and parameters: {'learning_rate': 0.3339141719081484, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3588145244155687, 'subsample':
0.8827537212013075}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:18,459] Trial 216 finished with value: 0.008943573442522161

and parameters: {'learning_rate': 0.3361308669429203, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.36344961185519364, 'subsample':
0.8828727032039406}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:18,787] Trial 217 finished with value: 0.00908301236519783
and parameters: {'learning_rate': 0.33129052237204343, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3603981780846129, 'subsample':
0.8831349964229619}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:19,122] Trial 218 finished with value: 0.008482828977801638
and parameters: {'learning_rate': 0.33499133045162427, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3578529582730522, 'subsample':
0.8825249791061258}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:19,456] Trial 219 finished with value: 0.008530701932666824
and parameters: {'learning_rate': 0.33213757553681356, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35577827475618423, 'subsample':
0.8827037163330131}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:19,786] Trial 220 finished with value: 0.009042823255504522
and parameters: {'learning_rate': 0.3340406477787955, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3506016417929208, 'subsample':
0.8830009808891001}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:20,127] Trial 221 finished with value: 0.007844180064622053
and parameters: {'learning_rate': 0.3334115154859459, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3608730808341926, 'subsample':
0.8823993078216215}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:20,465] Trial 222 finished with value: 0.009771087642938886
and parameters: {'learning_rate': 0.33281810463941525, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3624514167922188, 'subsample':
0.8823723664628941}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:20,819] Trial 223 finished with value: 0.007466241070327791
and parameters: {'learning_rate': 0.33529288037463173, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36042618986522934, 'subsample':
0.8824738257955772}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:21,192] Trial 224 finished with value: 0.00851819261522608
and parameters: {'learning_rate': 0.33547489877978687, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35923995890948773, 'subsample':
0.8824950412224403}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:21,518] Trial 225 finished with value: 0.007743032347586041
and parameters: {'learning_rate': 0.33469941812401033, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35793470757576756, 'subsample':
0.8827900000004267}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:21,849] Trial 226 finished with value: 0.008964130997129904
and parameters: {'learning_rate': 0.3363183030041242, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3570113066095681, 'subsample':
0.8828709425730144}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:22,193] Trial 227 finished with value: 0.008685822454636356
and parameters: {'learning_rate': 0.33490553216581614, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35862382170768614, 'subsample':
0.8826256176627596}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:22,511] Trial 228 finished with value: 0.008324096804271224

and parameters: {'learning_rate': 0.3376005082630996, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35994872283118556, 'subsample':
0.8823018643237542}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:22,831] Trial 229 finished with value: 0.010748286154834336
and parameters: {'learning_rate': 0.33542308214258065, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35423610104006514, 'subsample':
0.8830287837020264}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:23,169] Trial 230 finished with value: 0.008379984360764573
and parameters: {'learning_rate': 0.33455045977618436, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3575288532019221, 'subsample':
0.882529435439437}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:23,485] Trial 231 finished with value: 0.008718329828254306
and parameters: {'learning_rate': 0.333882113101856, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36158417028550177, 'subsample':
0.882725139169428}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:23,794] Trial 232 finished with value: 0.007362684057980181
and parameters: {'learning_rate': 0.332889258988175, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3596208511931625, 'subsample':
0.8827752734359406}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:24,129] Trial 233 finished with value: 0.008007499422497821
and parameters: {'learning_rate': 0.3325380987636778, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3599442706627206, 'subsample':
0.8828461787140539}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:24,461] Trial 234 finished with value: 0.007939641656868545
and parameters: {'learning_rate': 0.3330873637764972, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.35827868837292975, 'subsample':
0.882620740830093}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:24,794] Trial 235 finished with value: 0.00751580995073497
and parameters: {'learning_rate': 0.3347091137407935, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3565040007714712, 'subsample':
0.8829035023322098}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:25,130] Trial 236 finished with value: 0.008554756708598996
and parameters: {'learning_rate': 0.3363878238721767, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3561162793083918, 'subsample':
0.8824815726908228}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:25,444] Trial 237 finished with value: 0.009507330293956 89
and parameters: {'learning_rate': 0.33550408530302434, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3557537252497664, 'subsample':
0.8827324325118785}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:26,092] Trial 238 finished with value: 0.008516264078711 27
and parameters: {'learning_rate': 0.3345723014511578, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.35213648790783103, 'subsample':
0.8822196887636824}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:27,102] Trial 239 finished with value: 0.009115038915637983
and parameters: {'learning_rate': 0.3313662079458683, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.3608007447983572, 'subsample':
0.8831890301000268}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:28,037] Trial 240 finished with value: 0.008479797015009808

and parameters: {'learning_rate': 0.33685821628126417, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36354239421197265, 'subsample':
0.8828338112038231}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:29,075] Trial 241 finished with value: 0.00736543306536106
and parameters: {'learning_rate': 0.3335703900065452, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35978089126489704, 'subsample':
0.882958978569281}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:30,838] Trial 242 finished with value: 0.010089195797007289
and parameters: {'learning_rate': 0.3347065288537387, 'max_depth': 10,
'n_estimators': 282, 'reg_lambda': 0.35945572043056623, 'subsample':
0.883058231712331}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:31,176] Trial 243 finished with value: 0.00814678267780835
and parameters: {'learning_rate': 0.3325207358981083, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35786459618988814, 'subsample':
0.8829002604015437}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:31,529] Trial 244 finished with value: 0.007754109558485722
and parameters: {'learning_rate': 0.3333900381451345, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3611014102491736, 'subsample':
0.8826499277608669}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:31,853] Trial 245 finished with value: 0.007850368607404712
and parameters: {'learning_rate': 0.335558830263683, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3614377465911585, 'subsample':
0.8827460841808508}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:32,185] Trial 246 finished with value: 0.007394035428810518
and parameters: {'learning_rate': 0.33367101534640387, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3608792860237179, 'subsample':
0.8824100580034522}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:32,557] Trial 247 finished with value: 0.00973056852043737
and parameters: {'learning_rate': 0.3332385154418327, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3625404880156534, 'subsample':
0.8823400350369696}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:32,920] Trial 248 finished with value: 0.008119184594397293
and parameters: {'learning_rate': 0.3347818258338742, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35979644020154883, 'subsample':
0.8829342090009671}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:33,265] Trial 249 finished with value: 0.009500389228468721
and parameters: {'learning_rate': 0.33184818229220536, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3641251421892659, 'subsample':
0.8826064411115316}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:33,675] Trial 250 finished with value: 0.0073858587123346335
and parameters: {'learning_rate': 0.3336311757529831, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3607841493874016, 'subsample':
0.8824012564748264}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:34,024] Trial 251 finished with value: 0.008060240015138687
and parameters: {'learning_rate': 0.3332401169231152, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.3580764599036851, 'subsample':
0.8822428329789754}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:34,365] Trial 252 finished with value: 0.007070958612373056

and parameters: {'learning_rate': 0.3356638417007707, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3596468605945499, 'subsample':
0.8823880756848547}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:34,753] Trial 253 finished with value: 0.007678115413008934
and parameters: {'learning_rate': 0.33581772379008373, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3591925747988301, 'subsample':
0.8823652320989811}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:35,117] Trial 254 finished with value: 0.008566534448687062
and parameters: {'learning_rate': 0.3366694681117868, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.35944296370875384, 'subsample':
0.882148087064477}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:35,440] Trial 255 finished with value: 0.009337452819034807
and parameters: {'learning_rate': 0.33583599513207457, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3628019058725942, 'subsample':
0.8823547706504224}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:35,799] Trial 256 finished with value: 0.0076074060377496425
and parameters: {'learning_rate': 0.33808392393732145, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3602862488684093, 'subsample':
0.8824265093826399}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:36,137] Trial 257 finished with value: 0.008953086170352273
and parameters: {'learning_rate': 0.3382012105371805, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.35955826384743367, 'subsample':
0.8820656637583464}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:36,479] Trial 258 finished with value: 0.008746418002427507
and parameters: {'learning_rate': 0.33896101084446584, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.35711358295691126, 'subsample':
0.8822473925607589}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:36,814] Trial 259 finished with value: 0.00814223794794809
and parameters: {'learning_rate': 0.3372315705954263, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3549748438638799, 'subsample':
0.8824379420875238}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:37,150] Trial 260 finished with value: 0.008753345678542567
and parameters: {'learning_rate': 0.3360347044382691, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3588281479317108, 'subsample':
0.8823716677593847}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:37,481] Trial 261 finished with value: 0.00909884871571787
and parameters: {'learning_rate': 0.33540881680089296, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.36204452752736827, 'subsample':
0.8822017554616971}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:37,827] Trial 262 finished with value: 0.008455893767318983
and parameters: {'learning_rate': 0.33631808762616294, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.36021121810234175, 'subsample':
0.8824391993501673}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:38,145] Trial 263 finished with value: 0.007972492474444075
and parameters: {'learning_rate': 0.3378607474755416, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.35682724927365933, 'subsample':
0.8823069147069849}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:38,467] Trial 264 finished with value: 0.008952600199685403

and parameters: {'learning_rate': 0.33464501149756537, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3653782159669088, 'subsample':
0.8824022167525176}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:38,805] Trial 265 finished with value: 0.008867997941160147
and parameters: {'learning_rate': 0.33702747095231966, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.35911190765210993, 'subsample':
0.8825110839107354}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:39,120] Trial 266 finished with value: 0.009153226049248923
and parameters: {'learning_rate': 0.3354367333163388, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3627577057090526, 'subsample':
0.8825245813564173}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:39,443] Trial 267 finished with value: 0.00849289654346087
and parameters: {'learning_rate': 0.33406689669768375, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3605168712735863, 'subsample':
0.8821045992476155}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:39,783] Trial 268 finished with value: 0.008671559179817481
and parameters: {'learning_rate': 0.33035355463330657, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3581591247277405, 'subsample':
0.8822806470416594}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:40,138] Trial 269 finished with value: 0.009239384745725181
and parameters: {'learning_rate': 0.3323426223855928, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35387179633905574, 'subsample':
0.8824363724222775}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:40,464] Trial 270 finished with value: 0.008652934736199021
and parameters: {'learning_rate': 0.33490235293093, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.3562365533741219, 'subsample':
0.8819815782742103}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:40,963] Trial 271 finished with value: 0.009084422884347064
and parameters: {'learning_rate': 0.3404657834235532, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36184379700859076, 'subsample':
0.8825658495298732}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:42,419] Trial 272 finished with value: 0.009476989490162459
and parameters: {'learning_rate': 0.33397908992538644, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36396772450846665, 'subsample':
0.8830808367416246}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:43,900] Trial 273 finished with value: 0.00991589849728247
and parameters: {'learning_rate': 0.33645172358426834, 'max_depth': 10,
'n_estimators': 243, 'reg_lambda': 0.3603532132227755, 'subsample':
0.8833321371889429}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:45,621] Trial 274 finished with value: 0.008041462554817273
and parameters: {'learning_rate': 0.3357259419554067, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3582577685734272, 'subsample':
0.8821616736178521}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:45,947] Trial 275 finished with value: 0.007436636959059408
and parameters: {'learning_rate': 0.3317239748068794, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.35706819970404063, 'subsample':
0.8826839612564409}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:46,286] Trial 276 finished with value: 0.008747354365950758

and parameters: {'learning_rate': 0.33159181754068356, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.35508983313153164, 'subsample':
0.8826931109575866}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:46,617] Trial 277 finished with value: 0.009052270994392113
and parameters: {'learning_rate': 0.33258350723254126, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.3835248632618111, 'subsample':
0.8823654383512819}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:46,949] Trial 278 finished with value: 0.0075539038549110905
and parameters: {'learning_rate': 0.3335660984470864, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.35677659337968737, 'subsample':
0.8825773765082191}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:47,303] Trial 279 finished with value: 0.008529706999977574
and parameters: {'learning_rate': 0.33216783553651025, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.35358375139958537, 'subsample':
0.8825987998724885}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:47,642] Trial 280 finished with value: 0.008230438371383958
and parameters: {'learning_rate': 0.33344937126631796, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.35695943235389377, 'subsample':
0.8827205164589955}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:48,007] Trial 281 finished with value: 0.008541698676472904
and parameters: {'learning_rate': 0.331356806333547, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.35535723026956895, 'subsample':
0.8824846247120484}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:48,345] Trial 282 finished with value: 0.009534523963217799
and parameters: {'learning_rate': 0.3302774803097564, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36115733321284743, 'subsample':
0.882824183283461}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:48,689] Trial 283 finished with value: 0.007735149532724711
and parameters: {'learning_rate': 0.3334311456090927, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3568057188790564, 'subsample':
0.8826080040631865}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:48,999] Trial 284 finished with value: 0.00934455214450541
and parameters: {'learning_rate': 0.3344375950716993, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.36269749258886924, 'subsample':
0.8826969896252318}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:49,332] Trial 285 finished with value: 0.008714863553574613
and parameters: {'learning_rate': 0.33292567816853486, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.360032846506261, 'subsample':
0.8825126525721319}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:49,638] Trial 286 finished with value: 0.00843891843056203
and parameters: {'learning_rate': 0.33500885647215783, 'max_depth': 10,
'n_estimators': 249, 'reg_lambda': 0.35250795319841505, 'subsample':
0.8828070470820729}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:49,967] Trial 287 finished with value: 0.008458835327192995
and parameters: {'learning_rate': 0.3322520075877043, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36630006604667775, 'subsample':
0.8822374608055591}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:50,338] Trial 288 finished with value: 0.007382867244633704

and parameters: {'learning_rate': 0.33385300793576395, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.3575608447038382, 'subsample':
0.882634195285672}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:50,684] Trial 289 finished with value: 0.008482564603764843
and parameters: {'learning_rate': 0.334534592489972, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.3569367419002563, 'subsample':
0.8826762966883765}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:51,033] Trial 290 finished with value: 0.008739855303127503
and parameters: {'learning_rate': 0.3336129839784751, 'max_depth': 10,
'n_estimators': 305, 'reg_lambda': 0.35429587116141625, 'subsample':
0.88282846559077}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:51,402] Trial 291 finished with value: 0.008328948746354163
and parameters: {'learning_rate': 0.3373717921014243, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3579634238552821, 'subsample':
0.8824824460248223}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:51,739] Trial 292 finished with value: 0.008620133713076444
and parameters: {'learning_rate': 0.3311486723366027, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.3556717959104634, 'subsample':
0.8829035246740405}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:52,069] Trial 293 finished with value: 0.007926455588206401
and parameters: {'learning_rate': 0.332558304221761, 'max_depth': 10,
'n_estimators': 307, 'reg_lambda': 0.3616542685858233, 'subsample':
0.8823856029643824}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:52,416] Trial 294 finished with value: 0.009506437068197668
and parameters: {'learning_rate': 0.33822746596542413, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3510867804823128, 'subsample':
0.8827010776663718}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:52,735] Trial 295 finished with value: 0.009380564378023051
and parameters: {'learning_rate': 0.3352415046414051, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.36354246302578186, 'subsample':
0.8825539431317477}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:53,071] Trial 296 finished with value: 0.007791468127970892
and parameters: {'learning_rate': 0.33354874064909545, 'max_depth': 10,
'n_estimators': 304, 'reg_lambda': 0.3589463096611054, 'subsample':
0.8822958678754028}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:53,423] Trial 297 finished with value: 0.008165371671962554
and parameters: {'learning_rate': 0.33453875490121865, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36092657525445626, 'subsample':
0.8829473910168938}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:53,745] Trial 298 finished with value: 0.009349763674750882
and parameters: {'learning_rate': 0.3361350962327969, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3573598941628229, 'subsample':
0.8828098174364686}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:54,083] Trial 299 finished with value: 0.010585146514606385
and parameters: {'learning_rate': 0.33207407415370394, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.35925960541127383, 'subsample':
0.8831191067145805}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:54,438] Trial 300 finished with value: 0.01015074158178934

and parameters: {'learning_rate': 0.33515697758111995, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3642888882970477, 'subsample':
0.8824430076798506}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:54,814] Trial 301 finished with value: 0.008370982249938872
and parameters: {'learning_rate': 0.3296547770531095, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.3562472961426623, 'subsample':
0.8826433105871626}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:55,125] Trial 302 finished with value: 0.007696868581603434
and parameters: {'learning_rate': 0.33311567799187164, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36172466807503917, 'subsample':
0.8821670842637722}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:55,634] Trial 303 finished with value: 0.008356297586465491
and parameters: {'learning_rate': 0.3368208431993277, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3601858928701284, 'subsample':
0.8825643654642507}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:56,814] Trial 304 finished with value: 0.007604474443955242
and parameters: {'learning_rate': 0.33394760041992816, 'max_depth': 10,
'n_estimators': 307, 'reg_lambda': 0.35864831838841543, 'subsample':
0.8827627614107154}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:57,740] Trial 305 finished with value: 0.0077869829825351535
and parameters: {'learning_rate': 0.3340786507469252, 'max_depth': 10,
'n_estimators': 309, 'reg_lambda': 0.35454429934524906, 'subsample':
0.8829728898485761}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:46:58,835] Trial 306 finished with value: 0.007478374608823415
and parameters: {'learning_rate': 0.33422899576902215, 'max_depth': 10,
'n_estimators': 306, 'reg_lambda': 0.35801301304138106, 'subsample':
0.8828084729652449}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:00,632] Trial 307 finished with value: 0.009427800790865984
and parameters: {'learning_rate': 0.3354173509879903, 'max_depth': 11,
'n_estimators': 305, 'reg_lambda': 0.35729598217793257, 'subsample':
0.8832137479512016}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:00,944] Trial 308 finished with value: 0.008913152546200388
and parameters: {'learning_rate': 0.3329498168239354, 'max_depth': 10,
'n_estimators': 307, 'reg_lambda': 0.3531493080045667, 'subsample':
0.8828847554029957}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:01,271] Trial 309 finished with value: 0.00842289402537208
and parameters: {'learning_rate': 0.3345434731403536, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3554367651970931, 'subsample':
0.8830426952268486}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:01,613] Trial 310 finished with value: 0.008529524153163905
and parameters: {'learning_rate': 0.3320483230780257, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3576924148999946, 'subsample':
0.8827100499042319}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:01,926] Trial 311 finished with value: 0.008287184004383535
and parameters: {'learning_rate': 0.3308012475869885, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3925283106385996, 'subsample':
0.8828325941758817}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:02,253] Trial 312 finished with value: 0.008898074477009849

and parameters: {'learning_rate': 0.3357318301506137, 'max_depth': 10,
'n_estimators': 289, 'reg_lambda': 0.36254050928645926, 'subsample':
0.8826239452185921}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:02,594] Trial 313 finished with value: 0.007220918154742843
and parameters: {'learning_rate': 0.3336549687748178, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3590347676102925, 'subsample':
0.8829056820132815}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:02,923] Trial 314 finished with value: 0.007759744285572493
and parameters: {'learning_rate': 0.3348289412631233, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3593945136620758, 'subsample':
0.8829907027483798}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:03,249] Trial 315 finished with value: 0.009011701892709908
and parameters: {'learning_rate': 0.33267862087946276, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.36136451735213465, 'subsample':
0.88308257255436}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:03,599] Trial 316 finished with value: 0.0080723598303094
and parameters: {'learning_rate': 0.3341160928662773, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3586019828247511, 'subsample':
0.8829119073815932}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:03,924] Trial 317 finished with value: 0.008273303424093712
and parameters: {'learning_rate': 0.3364390398333205, 'max_depth': 10,
'n_estimators': 276, 'reg_lambda': 0.348777669779431, 'subsample':
0.8827976770891999}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:04,243] Trial 318 finished with value: 0.010340850490065263
and parameters: {'learning_rate': 0.3350617990635568, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3602808920001435, 'subsample':
0.8827513550351405}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:04,564] Trial 319 finished with value: 0.009882286941798088
and parameters: {'learning_rate': 0.331553216297461, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3645477381091089, 'subsample':
0.8831436355687433}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:04,900] Trial 320 finished with value: 0.008412819605278673
and parameters: {'learning_rate': 0.3330217390610912, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.3629697966543775, 'subsample':
0.8829489000757179}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:05,225] Trial 321 finished with value: 0.007382003161536337
and parameters: {'learning_rate': 0.3339698404190706, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3583198810042157, 'subsample':
0.882327635099304}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:05,541] Trial 322 finished with value: 0.008651812895184461
and parameters: {'learning_rate': 0.33373706103166795, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3602953035229876, 'subsample':
0.882043510298511}. Best is trial 141 with value: 0.0068689141134665585.
[I 2024-08-30 19:47:05,887] Trial 323 finished with value: 0.0067739747030735875
and parameters: {'learning_rate': 0.33589861688456785, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.3616289776335298, 'subsample':
0.8823408378369086}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:06,214] Trial 324 finished with value: 0.008997548412178324

and parameters: {'learning_rate': 0.33630171758761956, 'max_depth': 10,
'n_estimators': 268, 'reg_lambda': 0.36303523078191974, 'subsample':
0.8821772125268847}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:06,529] Trial 325 finished with value: 0.008659122079519499
and parameters: {'learning_rate': 0.3371425698679298, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3618400638998432, 'subsample':
0.8822804346566889}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:06,878] Trial 326 finished with value: 0.008980086946756987
and parameters: {'learning_rate': 0.33580628492188647, 'max_depth': 10,
'n_estimators': 274, 'reg_lambda': 0.36546462251738976, 'subsample':
0.8823134406266399}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:07,200] Trial 327 finished with value: 0.007956865664903655
and parameters: {'learning_rate': 0.33242025829398436, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3612300281700617, 'subsample':
0.8823791977771114}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:07,515] Trial 328 finished with value: 0.007298821679862773
and parameters: {'learning_rate': 0.33552695047316455, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35953989138427633, 'subsample':
0.8820889052138573}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:07,858] Trial 329 finished with value: 0.008203247746150411
and parameters: {'learning_rate': 0.3333365437429439, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.35914239883380616, 'subsample':
0.8818818004047659}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:08,175] Trial 330 finished with value: 0.009151909045032065
and parameters: {'learning_rate': 0.3352547407324387, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3620802825170431, 'subsample':
0.882071435915002}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:08,486] Trial 331 finished with value: 0.008431620699899894
and parameters: {'learning_rate': 0.3312517569351276, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.3585394217346816, 'subsample':
0.8820532886583894}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:08,793] Trial 332 finished with value: 0.010240956842797905
and parameters: {'learning_rate': 0.3369755950362433, 'max_depth': 10,
'n_estimators': 274, 'reg_lambda': 0.36363820980025063, 'subsample':
0.8819729295576657}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:09,138] Trial 333 finished with value: 0.009580745551152682
and parameters: {'learning_rate': 0.3105994040580003, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.36060668633870135, 'subsample':
0.8821744488704754}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:09,447] Trial 334 finished with value: 0.007632914535734558
and parameters: {'learning_rate': 0.3342791067307575, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.35957289473898274, 'subsample':
0.882241216075454}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:09,772] Trial 335 finished with value: 0.008603674625960291
and parameters: {'learning_rate': 0.3359433944312925, 'max_depth': 10,
'n_estimators': 265, 'reg_lambda': 0.3578717990422355, 'subsample':
0.8823211846992209}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:10,125] Trial 336 finished with value: 0.009566525792262562

and parameters: {'learning_rate': 0.33264149495203243, 'max_depth': 10,
'n_estimators': 267, 'reg_lambda': 0.36201141996546693, 'subsample':
0.8817759461120873}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:10,450] Trial 337 finished with value: 0.008713251476132281
and parameters: {'learning_rate': 0.3335614223637399, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35595572998336716, 'subsample':
0.8824409547790069}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:11,101] Trial 338 finished with value: 0.008199131308753991
and parameters: {'learning_rate': 0.3345966791793164, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35946172546671273, 'subsample':
0.8821467958260725}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:12,250] Trial 339 finished with value: 0.00812664562367425
and parameters: {'learning_rate': 0.3284199021018748, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.36092391008461705, 'subsample':
0.8825087659061005}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:13,850] Trial 340 finished with value: 0.008202114209025432
and parameters: {'learning_rate': 0.3317452252037892, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35755529839686675, 'subsample':
0.8822639959322066}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:15,573] Trial 341 finished with value: 0.009341119799764753
and parameters: {'learning_rate': 0.3357989422229469, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36476450787596665, 'subsample':
0.882376592771263}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:15,913] Trial 342 finished with value: 0.009762148356844743
and parameters: {'learning_rate': 0.3333126569465793, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3632332896934895, 'subsample':
0.8826352200128246}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:16,264] Trial 343 finished with value: 0.008378638783776567
and parameters: {'learning_rate': 0.3302346979434883, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3591052426618783, 'subsample':
0.8825227993248913}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:16,594] Trial 344 finished with value: 0.007684379900810985
and parameters: {'learning_rate': 0.33466110382053116, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3608818770747948, 'subsample':
0.8822475703527676}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:16,906] Trial 345 finished with value: 0.00828424308603268
and parameters: {'learning_rate': 0.3370745655992541, 'max_depth': 10,
'n_estimators': 267, 'reg_lambda': 0.3546222272271838, 'subsample':
0.8826910739701292}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:17,250] Trial 346 finished with value: 0.008264325010604423
and parameters: {'learning_rate': 0.3323906762688717, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.35713410419884517, 'subsample':
0.882400725056373}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:17,560] Trial 347 finished with value: 0.009235807881587252
and parameters: {'learning_rate': 0.3337290582155166, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.3671806403663681, 'subsample':
0.8821309973517193}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:17,883] Trial 348 finished with value: 0.009004300929527411

and parameters: {'learning_rate': 0.3353774875624079, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.36191361839867486, 'subsample':
0.8825768261163869}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:18,230] Trial 349 finished with value: 0.00817269458243854
and parameters: {'learning_rate': 0.3342121339452465, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.35986242800916557, 'subsample':
0.8824715692501457}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:18,557] Trial 350 finished with value: 0.008467242012076258
and parameters: {'learning_rate': 0.33634898355547493, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35828151330405833, 'subsample':
0.8819299492914278}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:18,915] Trial 351 finished with value: 0.008227435117842734
and parameters: {'learning_rate': 0.33868054680517523, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3556397795687678, 'subsample':
0.8826968034806033}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:19,242] Trial 352 finished with value: 0.009823643675871912
and parameters: {'learning_rate': 0.3325498006683769, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.36308907399303153, 'subsample':
0.8823627692941175}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:19,564] Trial 353 finished with value: 0.009003598249259623
and parameters: {'learning_rate': 0.3347395027120646, 'max_depth': 10,
'n_estimators': 273, 'reg_lambda': 0.36017680747003644, 'subsample':
0.8830690489056896}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:19,898] Trial 354 finished with value: 0.010498367620079219
and parameters: {'learning_rate': 0.3332997975938552, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3581829532345436, 'subsample':
0.8832110469202685}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:20,217] Trial 355 finished with value: 0.00900867710458443
and parameters: {'learning_rate': 0.33088408896998067, 'max_depth': 10,
'n_estimators': 277, 'reg_lambda': 0.3525422501787265, 'subsample':
0.8828802392452397}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:20,556] Trial 356 finished with value: 0.007155432977271568
and parameters: {'learning_rate': 0.33556104687951593, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36149871674387435, 'subsample':
0.8822385580558101}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:20,897] Trial 357 finished with value: 0.010295337750400244
and parameters: {'learning_rate': 0.3373248126078869, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.36436194851428066, 'subsample':
0.8819929268136375}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:21,261] Trial 358 finished with value: 0.009639960353351108
and parameters: {'learning_rate': 0.3360744291405919, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3619077483814021, 'subsample':
0.8821692109772055}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:21,613] Trial 359 finished with value: 0.007341075612052111
and parameters: {'learning_rate': 0.33523188502114826, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3607989591016018, 'subsample':
0.8822592918675164}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:21,948] Trial 360 finished with value: 0.008519290306665643

and parameters: {'learning_rate': 0.3365643541958964, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35978715919514836, 'subsample':
0.882092842072285}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:22,295] Trial 361 finished with value: 0.009428514358583117
and parameters: {'learning_rate': 0.33539141346939005, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3780790023411828, 'subsample':
0.882252930863488}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:22,629] Trial 362 finished with value: 0.007743825495672176
and parameters: {'learning_rate': 0.3353643630930733, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3615205981536012, 'subsample':
0.8822025150305368}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:22,959] Trial 363 finished with value: 0.008941233938938845
and parameters: {'learning_rate': 0.33800915881914595, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.36569885383631984, 'subsample':
0.8823340420428172}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:23,282] Trial 364 finished with value: 0.008845038436382954
and parameters: {'learning_rate': 0.3364898034243114, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3588579500209047, 'subsample':
0.882057904046342}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:23,620] Trial 365 finished with value: 0.009572486858441144
and parameters: {'learning_rate': 0.3347946768995426, 'max_depth': 10,
'n_estimators': 280, 'reg_lambda': 0.362991992785546, 'subsample':
0.8822964806413822}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:23,930] Trial 366 finished with value: 0.007530401388576206
and parameters: {'learning_rate': 0.33377201424577274, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3572489517182845, 'subsample':
0.8824441140443947}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:24,254] Trial 367 finished with value: 0.007232129899825572
and parameters: {'learning_rate': 0.3358295609072756, 'max_depth': 10,
'n_estimators': 257, 'reg_lambda': 0.3605075647320104, 'subsample':
0.8822349187716131}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:24,581] Trial 368 finished with value: 0.009242850952310344
and parameters: {'learning_rate': 0.33738936797855046, 'max_depth': 10,
'n_estimators': 243, 'reg_lambda': 0.3607359335390967, 'subsample':
0.8818534298887003}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:24,881] Trial 369 finished with value: 0.008821492452760952
and parameters: {'learning_rate': 0.3357501898671842, 'max_depth': 10,
'n_estimators': 255, 'reg_lambda': 0.3689835706708403, 'subsample':
0.8821295244004218}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:25,248] Trial 370 finished with value: 0.009483886474616341
and parameters: {'learning_rate': 0.33754962121147103, 'max_depth': 10,
'n_estimators': 262, 'reg_lambda': 0.36268534482743864, 'subsample':
0.8822585007721852}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:25,814] Trial 371 finished with value: 0.008793548572826713
and parameters: {'learning_rate': 0.33675762315613256, 'max_depth': 10,
'n_estimators': 260, 'reg_lambda': 0.3602217841153078, 'subsample':
0.8820257329119252}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:27,259] Trial 372 finished with value: 0.009212246104341465

and parameters: {'learning_rate': 0.3356533689471092, 'max_depth': 10,
'n_estimators': 283, 'reg_lambda': 0.36405759337955856, 'subsample':
0.8823276952070416}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:28,605] Trial 373 finished with value: 0.008748737802324366
and parameters: {'learning_rate': 0.3391492965910131, 'max_depth': 10,
'n_estimators': 258, 'reg_lambda': 0.3616344059628221, 'subsample':
0.8821290049434919}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:30,275] Trial 374 finished with value: 0.008594193179245924
and parameters: {'learning_rate': 0.3347745328884858, 'max_depth': 10,
'n_estimators': 263, 'reg_lambda': 0.35878555051110833, 'subsample':
0.8822142119965385}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:30,570] Trial 375 finished with value: 0.009442493333485595
and parameters: {'learning_rate': 0.34670043259025685, 'max_depth': 10,
'n_estimators': 246, 'reg_lambda': 0.3601639780064653, 'subsample':
0.882405333866745}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:30,904] Trial 376 finished with value: 0.00879080650796006
and parameters: {'learning_rate': 0.33627393660621857, 'max_depth': 10,
'n_estimators': 249, 'reg_lambda': 0.36218034626690504, 'subsample':
0.8823456700638387}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:31,250] Trial 377 finished with value: 0.008687159433299143
and parameters: {'learning_rate': 0.33420567247100796, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3588913241531985, 'subsample':
0.8819723663757275}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:31,567] Trial 378 finished with value: 0.009723421093167355
and parameters: {'learning_rate': 0.3352761807495074, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36435624614613693, 'subsample':
0.8824928183446515}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:31,917] Trial 379 finished with value: 0.008191090032304551
and parameters: {'learning_rate': 0.3340183175949328, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3612919810295333, 'subsample':
0.8821841420944398}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:32,230] Trial 380 finished with value: 0.008213704978242172
and parameters: {'learning_rate': 0.33791343038756405, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3594911682509824, 'subsample':
0.8824550789020945}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:32,552] Trial 381 finished with value: 0.010358459580144492
and parameters: {'learning_rate': 0.33604205173651985, 'max_depth': 10,
'n_estimators': 285, 'reg_lambda': 0.3566907521845098, 'subsample':
0.8840818623444421}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:32,901] Trial 382 finished with value: 0.009289895276572013
and parameters: {'learning_rate': 0.3346180392079086, 'max_depth': 10,
'n_estimators': 251, 'reg_lambda': 0.3629345794913635, 'subsample':
0.8816607805710658}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:33,234] Trial 383 finished with value: 0.009955602053574977
and parameters: {'learning_rate': 0.333657758761544, 'max_depth': 11,
'n_estimators': 300, 'reg_lambda': 0.36613806932644766, 'subsample':
0.8822755397562173}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:33,567] Trial 384 finished with value: 0.007562760693571695

and parameters: {'learning_rate': 0.33527255639165177, 'max_depth': 10,
'n_estimators': 252, 'reg_lambda': 0.36095969923133825, 'subsample':
0.8824410131033501}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:33,972] Trial 385 finished with value: 0.010165854384368556
and parameters: {'learning_rate': 0.3499380005121971, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35842764692688167, 'subsample':
0.882529644359671}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:34,328] Trial 386 finished with value: 0.008058045878829108
and parameters: {'learning_rate': 0.33264757498834807, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3601953693387663, 'subsample':
0.882069432779721}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:34,664] Trial 387 finished with value: 0.008541649948602037
and parameters: {'learning_rate': 0.33694170562011067, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3580012951069745, 'subsample':
0.8823377011805876}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:35,048] Trial 388 finished with value: 0.009209514516892536
and parameters: {'learning_rate': 0.334355670536702, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3626662125054014, 'subsample':
0.8822267686894829}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:35,391] Trial 389 finished with value: 0.01063832581887216
and parameters: {'learning_rate': 0.3332585621241242, 'max_depth': 9,
'n_estimators': 299, 'reg_lambda': 0.3610737317350808, 'subsample':
0.8825884185465668}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:35,734] Trial 390 finished with value: 0.009233425679757629
and parameters: {'learning_rate': 0.3356336764149928, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3564361339556326, 'subsample':
0.8823724880206645}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:36,122] Trial 391 finished with value: 0.009056753310759 23
and parameters: {'learning_rate': 0.30529409964870846, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.35928658639721195, 'subsample':
0.8825595322202705}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:36,464] Trial 392 finished with value: 0.008596258195199083
and parameters: {'learning_rate': 0.33482610210399827, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.35778069523138256, 'subsample':
0.8821318404492339}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:36,786] Trial 393 finished with value: 0.009917171318618056
and parameters: {'learning_rate': 0.33667467045067595, 'max_depth': 10,
'n_estimators': 276, 'reg_lambda': 0.3637847592780285, 'subsample':
0.8823216890123505}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:37,134] Trial 394 finished with value: 0.008089912192155385
and parameters: {'learning_rate': 0.3335938733900703, 'max_depth': 10,
'n_estimators': 258, 'reg_lambda': 0.359962808634137, 'subsample':
0.8819855058869823}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:37,469] Trial 395 finished with value: 0.009481264221532 and
parameters: {'learning_rate': 0.31451888398484595, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3620722676356294, 'subsample':
0.8824450311013079}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:37,780] Trial 396 finished with value: 0.009618201439389393

and parameters: {'learning_rate': 0.335868837550852, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.3562670877314102, 'subsample':
0.8827606626339667}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:38,122] Trial 397 finished with value: 0.008696710279067599
and parameters: {'learning_rate': 0.33853392404030247, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.3594912165989432, 'subsample':
0.8825912043004112}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:38,452] Trial 398 finished with value: 0.008018393286450402
and parameters: {'learning_rate': 0.332889591198633, 'max_depth': 10,
'n_estimators': 290, 'reg_lambda': 0.36080844573572796, 'subsample':
0.8822345122314832}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:38,772] Trial 399 finished with value: 0.010531922182915187
and parameters: {'learning_rate': 0.3344165377792712, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3648800870676437, 'subsample':
0.8824421356878682}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:39,120] Trial 400 finished with value: 0.00898504972935964
and parameters: {'learning_rate': 0.33205264837416 55, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.35842915640014944, 'subsample':
0.8818983764417783}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:39,458] Trial 401 finished with value: 0.008704333694149797
and parameters: {'learning_rate': 0.3348802537426963, 'max_depth': 10,
'n_estimators': 240, 'reg_lambda': 0.36206491462292306, 'subsample':
0.8830060330247022}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:39,776] Trial 402 finished with value: 0.009453589372250257
and parameters: {'learning_rate': 0.3366082987524025, 'max_depth': 10,
'n_estimators': 278, 'reg_lambda': 0.3550971014011158, 'subsample':
0.8833120057950431}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:40,217] Trial 403 finished with value: 0.007491905624376483
and parameters: {'learning_rate': 0.33378250132342596, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.35756179239152547, 'subsample':
0.8826420585047852}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:41,453] Trial 404 finished with value: 0.007776843718026316
and parameters: {'learning_rate': 0.33549887762087305, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36060488809314856, 'subsample':
0.8822195410928753}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:43,037] Trial 405 finished with value: 0.009026389849705585
and parameters: {'learning_rate': 0.3329261590445754, 'max_depth': 10,
'n_estimators': 256, 'reg_lambda': 0.3588805192617665, 'subsample':
0.8827457979309843}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:44,646] Trial 406 finished with value: 0.00910015306257857
and parameters: {'learning_rate': 0.33746308691957144, 'max_depth': 10,
'n_estimators': 265, 'reg_lambda': 0.3626575032491819, 'subsample':
0.8823809680969515}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:44,985] Trial 407 finished with value: 0.008196866176457011
and parameters: {'learning_rate': 0.33413412041191065, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36098659962632823, 'subsample':
0.882574576922837}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:45,338] Trial 408 finished with value: 0.007755956744769858

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and parameters: {'learning_rate': 0.33589904219242994, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3561844400393826, 'subsample':
0.8821014318658}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:45,652] Trial 409 finished with value: 0.009096878114255167
and parameters: {'learning_rate': 0.3397937113023501, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.35904533731553095, 'subsample':
0.8828683873644414}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:45,988] Trial 410 finished with value: 0.008667345948870957
and parameters: {'learning_rate': 0.33174358912260576, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3640064391056845, 'subsample':
0.8822961638658686}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:46,352] Trial 411 finished with value: 0.00963101913380316
and parameters: {'learning_rate': 0.30253492786339753, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.35781790035670147, 'subsample':
0.8825104307485709}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:46,671] Trial 412 finished with value: 0.010524559238539455
and parameters: {'learning_rate': 0.33482083687419456, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36164412832184106, 'subsample':
0.8830212550344679}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:46,997] Trial 413 finished with value: 0.007594599092191311
and parameters: {'learning_rate': 0.33352741249903156, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.36008020911209665, 'subsample':
0.8826781968338819}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:47,329] Trial 414 finished with value: 0.00924198520568178
and parameters: {'learning_rate': 0.335198578668992, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3660889515309912, 'subsample':
0.8822185708446821}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:47,662] Trial 415 finished with value: 0.00786281110288689
and parameters: {'learning_rate': 0.336430728731521, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.363772626506435, 'subsample':
0.8828261690677291}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:47,975] Trial 416 finished with value: 0.00987728566717685
and parameters: {'learning_rate': 0.3330708722162986, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.35716604185137757, 'subsample':
0.8834901350941885}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:48,309] Trial 417 finished with value: 0.007576851977586235
and parameters: {'learning_rate': 0.3379030396659521, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3594960988316839, 'subsample':
0.882371556086537}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:48,664] Trial 418 finished with value: 0.008272601973170663
and parameters: {'learning_rate': 0.33458674425340057, 'max_depth': 10,
'n_estimators': 288, 'reg_lambda': 0.35465970538397007, 'subsample':
0.8820724259320313}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:48,993] Trial 419 finished with value: 0.010300512761480895
and parameters: {'learning_rate': 0.33215448195872477, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.3626139498352321, 'subsample':
0.8831781408093927}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:49,327] Trial 420 finished with value: 0.007631785902008184
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and parameters: {'learning_rate': 0.33392443069225153, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.3609810218165208, 'subsample':
0.8824256466029138}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:49,669] Trial 421 finished with value: 0.00796206234472905
and parameters: {'learning_rate': 0.3358048992491631, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3584810521985549, 'subsample':
0.8824999420385446}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:49,997] Trial 422 finished with value: 0.008106600129106235
and parameters: {'learning_rate': 0.3349740632105699, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3562680566348393, 'subsample':
0.8822801464603959}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:50,342] Trial 423 finished with value: 0.009578017303482898
and parameters: {'learning_rate': 0.32663003022494386, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3599112243882511, 'subsample':
0.8827592580426717}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:50,685] Trial 424 finished with value: 0.008493507165736106
and parameters: {'learning_rate': 0.3372093744000184, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.36235572610922057, 'subsample':
0.8829205086662071}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:51,020] Trial 425 finished with value: 0.008623730833275752
and parameters: {'learning_rate': 0.3329299761097403, 'max_depth': 10,
'n_estimators': 302, 'reg_lambda': 0.35809568886156873, 'subsample':
0.8826251886865628}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:51,347] Trial 426 finished with value: 0.008304426442687462
and parameters: {'learning_rate': 0.33397373833816213, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3610714821645095, 'subsample':
0.8821417484728784}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:51,705] Trial 427 finished with value: 0.008134881980200768
and parameters: {'learning_rate': 0.3308852384756759, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3597474696934724, 'subsample':
0.8825361273840421}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:52,037] Trial 428 finished with value: 0.009482652232914602
and parameters: {'learning_rate': 0.33607238284540764, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.36513344773034356, 'subsample':
0.8823272101754164}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:52,363] Trial 429 finished with value: 0.009854211762895321
and parameters: {'learning_rate': 0.33500576195803844, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3570980407531821, 'subsample':
0.8830298858717669}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:52,707] Trial 430 finished with value: 0.009588032162596776
and parameters: {'learning_rate': 0.3337429651023414, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3626195116543362, 'subsample':
0.8819867922665191}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:53,023] Trial 431 finished with value: 0.007729026409124215
and parameters: {'learning_rate': 0.3322780293414042, 'max_depth': 10,
'n_estimators': 292, 'reg_lambda': 0.35528549024805073, 'subsample':
0.8827920222578364}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:53,346] Trial 432 finished with value: 0.009796979545618811

and parameters: {'learning_rate': 0.33716043582759414, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3588299675491167, 'subsample':
0.8818092582726414}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:53,684] Trial 433 finished with value: 0.008361169445370227
and parameters: {'learning_rate': 0.33555182272076484, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.36065520445939286, 'subsample':
0.8824401484417405}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:54,003] Trial 434 finished with value: 0.009696677760797452
and parameters: {'learning_rate': 0.3341658913690298, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.3636670367732153, 'subsample':
0.8822176330272696}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:54,330] Trial 435 finished with value: 0.007627823421245659
and parameters: {'learning_rate': 0.3329633762673948, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36149336000709653, 'subsample':
0.8826804780328291}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:54,707] Trial 436 finished with value: 0.010037128150554688
and parameters: {'learning_rate': 0.3361149831139303, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.357854020224514, 'subsample':
0.8829158541152361}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:55,639] Trial 437 finished with value: 0.009050961144940752
and parameters: {'learning_rate': 0.3384384502052698, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.3595144618139567, 'subsample':
0.8823338939029484}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:57,431] Trial 438 finished with value: 0.008245395267240867
and parameters: {'learning_rate': 0.33144478628623925, 'max_depth': 10,
'n_estimators': 291, 'reg_lambda': 0.35656561920898777, 'subsample':
0.8826010622987956}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:59,420] Trial 439 finished with value: 0.008744551128188994
and parameters: {'learning_rate': 0.3348195296473683, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.39870392584034164, 'subsample':
0.8824830269458576}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:47:59,724] Trial 440 finished with value: 0.009528699848590186
and parameters: {'learning_rate': 0.33653391238001584, 'max_depth': 10,
'n_estimators': 275, 'reg_lambda': 0.3615920932733601, 'subsample':
0.8821642443513364}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:00,081] Trial 441 finished with value: 0.00966034792941858
and parameters: {'learning_rate': 0.3332769070949829, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.3589283256418373, 'subsample':
0.8831029058924336}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:00,437] Trial 442 finished with value: 0.009239528310497772
and parameters: {'learning_rate': 0.32936486770483275, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.363297378496734, 'subsample':
0.8828336545805495}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:00,772] Trial 443 finished with value: 0.007487573412941 and
parameters: {'learning_rate': 0.33429550116264833, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.3600586875167208, 'subsample':
0.88236694432993}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:01,138] Trial 444 finished with value: 0.008771900254471315

and parameters: {'learning_rate': 0.3322718750200326, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.35464072514527856, 'subsample':
0.882546558830105}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:01,470] Trial 445 finished with value: 0.007999840920210685
and parameters: {'learning_rate': 0.334910535554806, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3576490831230585, 'subsample':
0.8820571486732667}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:01,791] Trial 446 finished with value: 0.00933007104906538
and parameters: {'learning_rate': 0.335610693885701, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.367350225743466, 'subsample':
0.8826982788136214}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:02,151] Trial 447 finished with value: 0.008993831893106416
and parameters: {'learning_rate': 0.34228361396282553, 'max_depth': 10,
'n_estimators': 294, 'reg_lambda': 0.361251821312514, 'subsample':
0.8822567416269365}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:02,481] Trial 448 finished with value: 0.009688955183851796
and parameters: {'learning_rate': 0.33384797269669103, 'max_depth': 10,
'n_estimators': 298, 'reg_lambda': 0.36458221570944865, 'subsample':
0.8824527413459138}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:02,810] Trial 449 finished with value: 0.010013192396969444
and parameters: {'learning_rate': 0.336694943898209, 'max_depth': 10,
'n_estimators': 301, 'reg_lambda': 0.3587988058534261, 'subsample':
0.8829674239732632}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:03,163] Trial 450 finished with value: 0.008346818065755298
and parameters: {'learning_rate': 0.3329013119803238, 'max_depth': 10,
'n_estimators': 293, 'reg_lambda': 0.355810962966517, 'subsample':
0.8821501125737031}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:03,506] Trial 451 finished with value: 0.008801988995078901
and parameters: {'learning_rate': 0.3351888909745536, 'max_depth': 10,
'n_estimators': 296, 'reg_lambda': 0.36236174323043635, 'subsample':
0.8827639119019919}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:03,853] Trial 452 finished with value: 0.007273237136618539
and parameters: {'learning_rate': 0.3341512497704088, 'max_depth': 10,
'n_estimators': 266, 'reg_lambda': 0.3603641044999127, 'subsample':
0.8823370819108873}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:04,210] Trial 453 finished with value: 0.008320289123234317
and parameters: {'learning_rate': 0.33433052362043697, 'max_depth': 10,
'n_estimators': 268, 'reg_lambda': 0.3603041779675247, 'subsample':
0.8822428327433205}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:04,532] Trial 454 finished with value: 0.008606775635692248
and parameters: {'learning_rate': 0.33596082859794246, 'max_depth': 10,
'n_estimators': 254, 'reg_lambda': 0.35704627264031774, 'subsample':
0.8823440155206514}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:04,856] Trial 455 finished with value: 0.009215484889660565
and parameters: {'learning_rate': 0.3372955739496207, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.35870573313749576, 'subsample':
0.8820057918459256}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:05,208] Trial 456 finished with value: 0.008595324431718274

and parameters: {'learning_rate': 0.3350613724195375, 'max_depth': 10,
'n_estimators': 265, 'reg_lambda': 0.36155545767784264, 'subsample':
0.8809948323361954}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:05,520] Trial 457 finished with value: 0.007391051014831164
and parameters: {'learning_rate': 0.33354585084608396, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.35997577698965105, 'subsample':
0.8823093010593716}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:05,844] Trial 458 finished with value: 0.007761765395838527
and parameters: {'learning_rate': 0.3321765981396684, 'max_depth': 10,
'n_estimators': 273, 'reg_lambda': 0.35375244911046444, 'subsample':
0.8821297170311436}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:06,206] Trial 459 finished with value: 0.008677617388430637
and parameters: {'learning_rate': 0.32073163195655935, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.36322842590557153, 'subsample':
0.8822941146635108}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:06,543] Trial 460 finished with value: 0.008450651038749887
and parameters: {'learning_rate': 0.3333129997338444, 'max_depth': 10,
'n_estimators': 260, 'reg_lambda': 0.35736786252732927, 'subsample':
0.8823680958507766}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:06,858] Trial 461 finished with value: 0.008635029010678226
and parameters: {'learning_rate': 0.33790595823701075, 'max_depth': 10,
'n_estimators': 267, 'reg_lambda': 0.3600994072181867, 'subsample':
0.8821547639079007}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:07,195] Trial 462 finished with value: 0.010457480757330249
and parameters: {'learning_rate': 0.3362854404815318, 'max_depth': 9,
'n_estimators': 268, 'reg_lambda': 0.36172680084816755, 'subsample':
0.8822634827187762}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:07,559] Trial 463 finished with value: 0.009181215704378447
and parameters: {'learning_rate': 0.3343434611755921, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.38956317118526534, 'subsample':
0.8824199968953051}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:07,896] Trial 464 finished with value: 0.009648618795033701
and parameters: {'learning_rate': 0.33556060416571637, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.36551721370348306, 'subsample':
0.8819012846457458}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:08,223] Trial 465 finished with value: 0.009254931503731058
and parameters: {'learning_rate': 0.3304646330123666, 'max_depth': 11,
'n_estimators': 269, 'reg_lambda': 0.3584167103114386, 'subsample':
0.8820561825865678}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:08,577] Trial 466 finished with value: 0.008020395080639453
and parameters: {'learning_rate': 0.3339887830062185, 'max_depth': 10,
'n_estimators': 264, 'reg_lambda': 0.35589954236988125, 'subsample':
0.8822400088564618}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:08,882] Trial 467 finished with value: 0.00971455249914022
and parameters: {'learning_rate': 0.3368231571866593, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.3633390949783214, 'subsample':
0.8823910326427096}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:09,214] Trial 468 finished with value: 0.008964668509462738

and parameters: {'learning_rate': 0.3391670620111049, 'max_depth': 10,
'n_estimators': 274, 'reg_lambda': 0.35994544237858417, 'subsample':
0.8825030162166477}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:10,185] Trial 469 finished with value: 0.008374541209099558
and parameters: {'learning_rate': 0.33136999354888885, 'max_depth': 10,
'n_estimators': 266, 'reg_lambda': 0.3613493195233516, 'subsample':
0.8822069207857104}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:11,259] Trial 470 finished with value: 0.008361416239763298
and parameters: {'learning_rate': 0.3327212475618511, 'max_depth': 10,
'n_estimators': 262, 'reg_lambda': 0.35855584208421865, 'subsample':
0.8823355106497925}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:12,485] Trial 471 finished with value: 0.007383707336202861
and parameters: {'learning_rate': 0.3349946743453463, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3600886448556009, 'subsample':
0.8824874676202697}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:14,319] Trial 472 finished with value: 0.009978939073628398
and parameters: {'learning_rate': 0.3354079358422029, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.3641757400753642, 'subsample':
0.8824615041494926}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:14,659] Trial 473 finished with value: 0.008281443814429846
and parameters: {'learning_rate': 0.33652010573287344, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.36094276596831043, 'subsample':
0.8825331607856413}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:14,971] Trial 474 finished with value: 0.009368358524370585
and parameters: {'learning_rate': 0.3348625981050469, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.362566551516164, 'subsample':
0.882343361081575}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:15,311] Trial 475 finished with value: 0.009628747294285155
and parameters: {'learning_rate': 0.30018170196848476, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.35984036868081426, 'subsample':
0.8822010889212386}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:15,654] Trial 476 finished with value: 0.008248079633664694
and parameters: {'learning_rate': 0.33748812650033827, 'max_depth': 10,
'n_estimators': 267, 'reg_lambda': 0.3572425402149349, 'subsample':
0.88245013500895}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:15,988] Trial 477 finished with value: 0.00900204936605325
and parameters: {'learning_rate': 0.32328059109828, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3621208101497268, 'subsample':
0.8820866585557268}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:16,329] Trial 478 finished with value: 0.008084694230477012
and parameters: {'learning_rate': 0.33566204258156457, 'max_depth': 10,
'n_estimators': 274, 'reg_lambda': 0.35900127377231295, 'subsample':
0.8825903862456953}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:16,668] Trial 479 finished with value: 0.0076117918130981935
and parameters: {'learning_rate': 0.3336024133766897, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.36058900823590917, 'subsample':
0.8823323942001655}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:17,006] Trial 480 finished with value: 0.008416910990901217

and parameters: {'learning_rate': 0.3346277460043179, 'max_depth': 10,
'n_estimators': 273, 'reg_lambda': 0.3566061030195061, 'subsample':
0.8819029138294353}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:17,333] Trial 481 finished with value: 0.009709900479782865
and parameters: {'learning_rate': 0.3328534132190513, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.3640249149007687, 'subsample':
0.8825131097609595}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:17,681] Trial 482 finished with value: 0.01002508799844884
and parameters: {'learning_rate': 0.31168705081566084, 'max_depth': 10,
'n_estimators': 275, 'reg_lambda': 0.3584678066651122, 'subsample':
0.8822269745843865}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:18,002] Trial 483 finished with value: 0.009215105202804061
and parameters: {'learning_rate': 0.3362340951655769, 'max_depth': 10,
'n_estimators': 266, 'reg_lambda': 0.36213942012480943, 'subsample':
0.8823489746244862}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:18,306] Trial 484 finished with value: 0.010293267445023499
and parameters: {'learning_rate': 0.3450544775201006, 'max_depth': 10,
'n_estimators': 271, 'reg_lambda': 0.3864227103078394, 'subsample':
0.882102001725882}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:18,631] Trial 485 finished with value: 0.008766839731702548
and parameters: {'learning_rate': 0.33398659442006795, 'max_depth': 10,
'n_estimators': 257, 'reg_lambda': 0.35484794661643315, 'subsample':
0.8825982260983675}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:18,963] Trial 486 finished with value: 0.008870112996578607
and parameters: {'learning_rate': 0.3351495648608345, 'max_depth': 10,
'n_estimators': 267, 'reg_lambda': 0.3601787788590384, 'subsample':
0.8819895247398777}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:19,296] Trial 487 finished with value: 0.008389430769563515
and parameters: {'learning_rate': 0.33840868941222674, 'max_depth': 10,
'n_estimators': 269, 'reg_lambda': 0.3575284578643763, 'subsample':
0.8824169783792621}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:19,634] Trial 488 finished with value: 0.008463419864419413
and parameters: {'learning_rate': 0.33223357823764804, 'max_depth': 10,
'n_estimators': 272, 'reg_lambda': 0.36596034699368674, 'subsample':
0.882266078868694}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:19,974] Trial 489 finished with value: 0.007970312181496747
and parameters: {'learning_rate': 0.3370087177385328, 'max_depth': 10,
'n_estimators': 278, 'reg_lambda': 0.36114586137772914, 'subsample':
0.8824635990522327}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:20,326] Trial 490 finished with value: 0.00764089730336239
and parameters: {'learning_rate': 0.33342544190814577, 'max_depth': 10,
'n_estimators': 264, 'reg_lambda': 0.3593942637994944, 'subsample':
0.8826117905563369}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:20,676] Trial 491 finished with value: 0.009025804582040147
and parameters: {'learning_rate': 0.33462558690250793, 'max_depth': 10,
'n_estimators': 281, 'reg_lambda': 0.36284406228098287, 'subsample':
0.8822664632487383}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:21,089] Trial 492 finished with value: 0.010102064054416222

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and parameters: {'learning_rate': 0.3175985907550153, 'max_depth': 10,
'n_estimators': 273, 'reg_lambda': 0.3581048592645143, 'subsample':
0.8821106298151986}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:21,428] Trial 493 finished with value: 0.008274023359162446
and parameters: {'learning_rate': 0.3358391585805095, 'max_depth': 10,
'n_estimators': 295, 'reg_lambda': 0.36066653789630604, 'subsample':
0.8824409239804051}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:21,773] Trial 494 finished with value: 0.008534757937515623
and parameters: {'learning_rate': 0.3316240929912704, 'max_depth': 10,
'n_estimators': 303, 'reg_lambda': 0.3567773816613771, 'subsample':
0.8823606102315522}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:22,134] Trial 495 finished with value: 0.010367908476532416
and parameters: {'learning_rate': 0.33439528490754483, 'max_depth': 10,
'n_estimators': 300, 'reg_lambda': 0.36455576932557643, 'subsample':
0.8825352482460568}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:22,452] Trial 496 finished with value: 0.008471423512909958
and parameters: {'learning_rate': 0.3330636207360605, 'max_depth': 10,
'n_estimators': 270, 'reg_lambda': 0.35960319165744553, 'subsample':
0.882189463657559}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:22,766] Trial 497 finished with value: 0.00818521938827459
and parameters: {'learning_rate': 0.33549718710490806, 'max_depth': 10,
'n_estimators': 268, 'reg_lambda': 0.35552355312125633, 'subsample':
0.882683638201072}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:23,117] Trial 498 finished with value: 0.009888439758284769
and parameters: {'learning_rate': 0.33661123631068834, 'max_depth': 10,
'n_estimators': 297, 'reg_lambda': 0.3626356019965711, 'subsample':
0.8823161688562874}. Best is trial 323 with value: 0.0067739747030735875.
[I 2024-08-30 19:48:23,438] Trial 499 finished with value: 0.0074529521808736655
and parameters: {'learning_rate': 0.33375785393345414, 'max_depth': 10,
'n_estimators': 299, 'reg_lambda': 0.3613066333291852, 'subsample':
0.8825437940237328}. Best is trial 323 with value: 0.0067739747030735875.

            i=2: {'learning_rate': 0.33589861688456785, 'max_depth':
10, 'n_estimators': 270, 'reg_lambda': 0.3616289776335298, 'subsample':
0.8823408378369086}
    MSE    i=2: 0.0067739747030735875
[9284. 9035. 9152.] [8377.66928101 8109.32889557 8958.98482513] [0.1  0.1  0.02]
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[I 2024-08-30 19:48:23,836] A new study created in memory with name: no-
name-7f9f0b8b-0064-4516-ae35-2707c9b795a9
[I 2024-08-30 19:48:24,235] Trial 0 finished with value: 0.009556499234988325
and parameters: {'learning_rate': 0.30816983302131945, 'max_depth': 7,
'n_estimators': 482, 'reg_lambda': 0.22277679906090408, 'subsample':
0.8819220100849772}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:25,719] Trial 1 finished with value: 0.010280265882110558
and parameters: {'learning_rate': 0.3269317245410991, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.1903437191077791, 'subsample':
0.8839277342036382}. Best is trial 0 with value: 0.009556499234988325.
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[I 2024-08-30 19:48:27,169] Trial 2 finished with value: 0.009912641719973124
and parameters: {'learning_rate': 0.32091485489308447, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.2088100336535326, 'subsample':
0.8857737227671193}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:29,053] Trial 3 finished with value: 0.01012168316589498 and
parameters: {'learning_rate': 0.3164774699352826, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.19496360699383797, 'subsample':
0.8858601420165148}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:29,392] Trial 4 finished with value: 0.0098788075150775 and
parameters: {'learning_rate': 0.32093992614774974, 'max_depth': 8,
'n_estimators': 422, 'reg_lambda': 0.22768444037508723, 'subsample':
0.8804503304234026}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:29,734] Trial 5 finished with value: 0.010105339470977207
and parameters: {'learning_rate': 0.28192849089677585, 'max_depth': 9,
'n_estimators': 500, 'reg_lambda': 0.2081545361701526, 'subsample':
0.8822516426369141}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:30,040] Trial 6 finished with value: 0.009909255803805661
and parameters: {'learning_rate': 0.3069258661474342, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.21484503659432488, 'subsample':
0.883745017970568}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:30,405] Trial 7 finished with value: 0.010475910713353135
and parameters: {'learning_rate': 0.32631806674686575, 'max_depth': 7,
'n_estimators': 432, 'reg_lambda': 0.20849022661697622, 'subsample':
0.8858261433190318}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:30,750] Trial 8 finished with value: 0.009991133004568258
and parameters: {'learning_rate': 0.2915233886848156, 'max_depth': 7,
'n_estimators': 457, 'reg_lambda': 0.1927455278116646, 'subsample':
0.8825166743884735}. Best is trial 0 with value: 0.009556499234988325.
[I 2024-08-30 19:48:31,114] Trial 9 finished with value: 0.009322003943477085
and parameters: {'learning_rate': 0.3057401725997314, 'max_depth': 7,
'n_estimators': 497, 'reg_lambda': 0.20102970972173784, 'subsample':
0.8838481849289552}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:31,483] Trial 10 finished with value: 0.010186726444218142
and parameters: {'learning_rate': 0.2961488834337003, 'max_depth': 10,
'n_estimators': 454, 'reg_lambda': 0.20054933403430897, 'subsample':
0.8842786655822853}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:31,870] Trial 11 finished with value: 0.0093514190009728 and
parameters: {'learning_rate': 0.3086018263799577, 'max_depth': 7,
'n_estimators': 478, 'reg_lambda': 0.22610378775112744, 'subsample':
0.8812812939147764}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:32,291] Trial 12 finished with value: 0.010664734743498291
and parameters: {'learning_rate': 0.29921984554117764, 'max_depth': 7,
'n_estimators': 475, 'reg_lambda': 0.21643095571376578, 'subsample':
0.8808723010277867}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:32,646] Trial 13 finished with value: 0.010539359794271464
and parameters: {'learning_rate': 0.3128007536557155, 'max_depth': 9,
'n_estimators': 472, 'reg_lambda': 0.20095745165009415, 'subsample':
0.8816149575850522}. Best is trial 9 with value: 0.009322003943477085.

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[I 2024-08-30 19:48:33,056] Trial 14 finished with value: 0.01087741336489789
and parameters: {'learning_rate': 0.3009931792029076, 'max_depth': 7,
'n_estimators': 485, 'reg_lambda': 0.20152099076410024, 'subsample':
0.8831972907054632}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:33,481] Trial 15 finished with value: 0.009860998701069448
and parameters: {'learning_rate': 0.29111577880654943, 'max_depth': 7,
'n_estimators': 444, 'reg_lambda': 0.2275241091851658, 'subsample':
0.884670074844911}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:33,872] Trial 16 finished with value: 0.009443156494828653
and parameters: {'learning_rate': 0.3053994759438912, 'max_depth': 9,
'n_estimators': 490, 'reg_lambda': 0.22001071331409405, 'subsample':
0.8812993775012191}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:34,245] Trial 17 finished with value: 0.009816028750674485
and parameters: {'learning_rate': 0.3126258490414205, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.2131503491301142, 'subsample':
0.8801534876025525}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:34,675] Trial 18 finished with value: 0.010463714079526695
and parameters: {'learning_rate': 0.2835900978248119, 'max_depth': 7,
'n_estimators': 469, 'reg_lambda': 0.20509305860246813, 'subsample':
0.8830494058019874}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:35,010] Trial 19 finished with value: 0.009330986846039977
and parameters: {'learning_rate': 0.31156829801099145, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.19676118500151468, 'subsample':
0.884719886960161}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:35,376] Trial 20 finished with value: 0.009632177457881901
and parameters: {'learning_rate': 0.3149301021641606, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.19673701246011346, 'subsample':
0.8849405375161001}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:35,749] Trial 21 finished with value: 0.009871033001638866
and parameters: {'learning_rate': 0.30970904132403254, 'max_depth': 7,
'n_estimators': 480, 'reg_lambda': 0.19759250832422068, 'subsample':
0.8849090702891095}. Best is trial 9 with value: 0.009322003943477085.
[I 2024-08-30 19:48:36,118] Trial 22 finished with value: 0.008563843489779198
and parameters: {'learning_rate': 0.3012629905179611, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.2039080942061984, 'subsample':
0.8832828495113444}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:36,497] Trial 23 finished with value: 0.009308946573739544
and parameters: {'learning_rate': 0.3017686842114211, 'max_depth': 9,
'n_estimators': 447, 'reg_lambda': 0.20347848053268286, 'subsample':
0.8835175887158955}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:36,850] Trial 24 finished with value: 0.010045956126069355
and parameters: {'learning_rate': 0.3026148111462779, 'max_depth': 9,
'n_estimators': 447, 'reg_lambda': 0.20498609923896718, 'subsample':
0.8836373753348081}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:37,201] Trial 25 finished with value: 0.009909507336652055
and parameters: {'learning_rate': 0.2957212311279798, 'max_depth': 9,
'n_estimators': 438, 'reg_lambda': 0.20472648516452463, 'subsample':
0.8828180612564235}. Best is trial 22 with value: 0.008563843489779198.
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[I 2024-08-30 19:48:37,572] Trial 26 finished with value: 0.010548529198514423
and parameters: {'learning_rate': 0.2898298732564246, 'max_depth': 10,
'n_estimators': 450, 'reg_lambda': 0.2119383845813892, 'subsample':
0.8835725659898784}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:37,915] Trial 27 finished with value: 0.009731289858497676
and parameters: {'learning_rate': 0.2973761508018165, 'max_depth': 9,
'n_estimators': 465, 'reg_lambda': 0.20299819722442797, 'subsample':
0.8841668130034176}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:38,255] Trial 28 finished with value: 0.01070718250063604
and parameters: {'learning_rate': 0.30389219792928174, 'max_depth': 9,
'n_estimators': 438, 'reg_lambda': 0.19973184330170196, 'subsample':
0.8832626867011635}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:38,644] Trial 29 finished with value: 0.009910306466358019
and parameters: {'learning_rate': 0.29276382930781675, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.20620667006552226, 'subsample':
0.8824026000609502}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:39,101] Trial 30 finished with value: 0.010240193386669524
and parameters: {'learning_rate': 0.2878196885729628, 'max_depth': 10,
'n_estimators': 428, 'reg_lambda': 0.210911337783588, 'subsample':
0.8819152861579818}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:40,738] Trial 31 finished with value: 0.009571302881005916
and parameters: {'learning_rate': 0.3094001592633345, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.19802307885555676, 'subsample':
0.8852760388586246}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:42,072] Trial 32 finished with value: 0.010134849541837382
and parameters: {'learning_rate': 0.30034536641882476, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.19430091756178317, 'subsample':
0.8843165608493446}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:43,841] Trial 33 finished with value: 0.009672495862171988
and parameters: {'learning_rate': 0.3048125548416629, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.2024042069052205, 'subsample':
0.8845598997837374}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:44,200] Trial 34 finished with value: 0.010303059158132415
and parameters: {'learning_rate': 0.3176749708806022, 'max_depth': 8,
'n_estimators': 498, 'reg_lambda': 0.19189376090626828, 'subsample':
0.8853101757907758}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:44,555] Trial 35 finished with value: 0.0087729451416545 and
parameters: {'learning_rate': 0.31176012417456306, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.1957036968700495, 'subsample':
0.8839767907084721}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:44,920] Trial 36 finished with value: 0.010478203529234497
and parameters: {'learning_rate': 0.3184531867732699, 'max_depth': 9,
'n_estimators': 467, 'reg_lambda': 0.19077554582693812, 'subsample':
0.883949129903648}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:45,283] Trial 37 finished with value: 0.009902489315814127
and parameters: {'learning_rate': 0.30312544629543015, 'max_depth': 8,
'n_estimators': 439, 'reg_lambda': 0.20671382976177366, 'subsample':
0.8833290346345535}. Best is trial 22 with value: 0.008563843489779198.

[I 2024-08-30 19:48:45,631] Trial 38 finished with value: 0.01051231899841222
and parameters: {'learning_rate': 0.3067530572776987, 'max_depth': 9,
'n_estimators': 444, 'reg_lambda': 0.19458378127660308, 'subsample':
0.8838804635421311}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:46,004] Trial 39 finished with value: 0.011053045064822698
and parameters: {'learning_rate': 0.32449348379856996, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.198413773314021, 'subsample':
0.8835723551344571}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:46,387] Trial 40 finished with value: 0.009956991183584335
and parameters: {'learning_rate': 0.3215067862763018, 'max_depth': 7,
'n_estimators': 420, 'reg_lambda': 0.20993329774527736, 'subsample':
0.8826548806942928}. Best is trial 22 with value: 0.008563843489779198.
[I 2024-08-30 19:48:46,735] Trial 41 finished with value: 0.008454025938724064
and parameters: {'learning_rate': 0.312196711638496, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.19612676264537524, 'subsample':
0.8839895861333238}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:47,122] Trial 42 finished with value: 0.010649518863904365
and parameters: {'learning_rate': 0.31505098605864984, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20314326334173463, 'subsample':
0.8840500323216162}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:47,495] Trial 43 finished with value: 0.008914828083133956
and parameters: {'learning_rate': 0.3065295759931061, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.1992067668524855, 'subsample':
0.8833846374843387}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:47,855] Trial 44 finished with value: 0.010495110053482167
and parameters: {'learning_rate': 0.31055610465488737, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.1957235837858992, 'subsample':
0.8827651070357114}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:48,243] Trial 45 finished with value: 0.009330855144886773
and parameters: {'learning_rate': 0.30715292739337563, 'max_depth': 8,
'n_estimators': 500, 'reg_lambda': 0.19321900209409504, 'subsample':
0.8834066773605689}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:48,619] Trial 46 finished with value: 0.010183870643733293
and parameters: {'learning_rate': 0.29755331232846677, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.19970762894331454, 'subsample':
0.8828892265394399}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:49,012] Trial 47 finished with value: 0.009683053659231762
and parameters: {'learning_rate': 0.3014597410922457, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.19565974717897472, 'subsample':
0.8820461167627809}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:49,373] Trial 48 finished with value: 0.0088367471378523 and
parameters: {'learning_rate': 0.2943867122051316, 'max_depth': 9,
'n_estimators': 487, 'reg_lambda': 0.2075449956363334, 'subsample':
0.8843894664243436}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:49,737] Trial 49 finished with value: 0.009191726603392016
and parameters: {'learning_rate': 0.2942213036454991, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20856200804603842, 'subsample':
0.8844648560373933}. Best is trial 41 with value: 0.008454025938724064.

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[I 2024-08-30 19:48:50,103] Trial 50 finished with value: 0.010412303563513388
and parameters: {'learning_rate': 0.31390538429144066, 'max_depth': 9,
'n_estimators': 493, 'reg_lambda': 0.21724853741462452, 'subsample':
0.8842317253734522}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:50,481] Trial 51 finished with value: 0.009160609351484246
and parameters: {'learning_rate': 0.2941238390052501, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20787708383179043, 'subsample':
0.8844590273671534}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:50,857] Trial 52 finished with value: 0.009098032007246942
and parameters: {'learning_rate': 0.28525097702677643, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.20726832000062623, 'subsample':
0.8852733087041735}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:51,277] Trial 53 finished with value: 0.010074062981588637
and parameters: {'learning_rate': 0.28634846208904735, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.19960686677085215, 'subsample':
0.8854259917922885}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:51,658] Trial 54 finished with value: 0.009553749699440662
and parameters: {'learning_rate': 0.28155633283111176, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.21332651299214098, 'subsample':
0.8849184600685325}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:52,058] Trial 55 finished with value: 0.010278051022990602
and parameters: {'learning_rate': 0.2803732708846559, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.20689546678271684, 'subsample':
0.885980238844926}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:52,416] Trial 56 finished with value: 0.010327198483197348
and parameters: {'learning_rate': 0.32960607206427317, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.20126964139841988, 'subsample':
0.8831274724151035}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:52,775] Trial 57 finished with value: 0.009904873124668744
and parameters: {'learning_rate': 0.28653975392809516, 'max_depth': 9,
'n_estimators': 481, 'reg_lambda': 0.2042352330131182, 'subsample':
0.8855241370056494}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:53,190] Trial 58 finished with value: 0.008749797955624042
and parameters: {'learning_rate': 0.2835890282634747, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.19859519449845006, 'subsample':
0.8838065692457663}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:53,567] Trial 59 finished with value: 0.010970420993118986
and parameters: {'learning_rate': 0.30775972371053195, 'max_depth': 7,
'n_estimators': 464, 'reg_lambda': 0.19282829844337582, 'subsample':
0.8837666236571429}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:54,308] Trial 60 finished with value: 0.009228638187695865
and parameters: {'learning_rate': 0.3114792803100097, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.19688803225079576, 'subsample':
0.8840752591724538}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:55,564] Trial 61 finished with value: 0.009116639250609715
and parameters: {'learning_rate': 0.28432993288563996, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.1982439630782064, 'subsample':
0.8851351307653835}. Best is trial 41 with value: 0.008454025938724064.
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[I 2024-08-30 19:48:58,577] Trial 62 finished with value: 0.009837694063644238
and parameters: {'learning_rate': 0.2899443085739879, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.2097885704662983, 'subsample':
0.8838439328061481}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:58,954] Trial 63 finished with value: 0.010258500741286439
and parameters: {'learning_rate': 0.28350055737473645, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.20153071125138394, 'subsample':
0.8847523560756038}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:59,332] Trial 64 finished with value: 0.008657417584653604
and parameters: {'learning_rate': 0.2985756856353272, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.20618987688698903, 'subsample':
0.8855898676720944}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:48:59,698] Trial 65 finished with value: 0.01000612482327668
and parameters: {'learning_rate': 0.3005914154833346, 'max_depth': 9,
'n_estimators': 467, 'reg_lambda': 0.19987141884265994, 'subsample':
0.8857177073816209}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:49:00,061] Trial 66 finished with value: 0.009066162546447086
and parameters: {'learning_rate': 0.2983585656631362, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.20548656180651576, 'subsample':
0.8833991798508605}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:49:00,458] Trial 67 finished with value: 0.00923444212608932
and parameters: {'learning_rate': 0.3048418292238912, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.2020395117829003, 'subsample':
0.8831283420186632}. Best is trial 41 with value: 0.008454025938724064.
[I 2024-08-30 19:49:00,841] Trial 68 finished with value: 0.008290941933048327
and parameters: {'learning_rate': 0.29609511692340973, 'max_depth': 8,
'n_estimators': 497, 'reg_lambda': 0.19579106417543188, 'subsample':
0.8836666855908925}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:01,211] Trial 69 finished with value: 0.009172480974222812
and parameters: {'learning_rate': 0.2952888415256048, 'max_depth': 9,
'n_estimators': 470, 'reg_lambda': 0.19135769372816935, 'subsample':
0.883668924121797}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:01,625] Trial 70 finished with value: 0.010008522154732066
and parameters: {'learning_rate': 0.2989186218001015, 'max_depth': 7,
'n_estimators': 467, 'reg_lambda': 0.19430155992961073, 'subsample':
0.8843444653460858}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:02,008] Trial 71 finished with value: 0.009077074591950464
and parameters: {'learning_rate': 0.2930425589545715, 'max_depth': 8,
'n_estimators': 497, 'reg_lambda': 0.19586111954875804, 'subsample':
0.8839575634208673}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:02,363] Trial 72 finished with value: 0.009839232300395646
and parameters: {'learning_rate': 0.30858148307385186, 'max_depth': 8,
'n_estimators': 500, 'reg_lambda': 0.19868581556864945, 'subsample':
0.8834736971478011}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:02,778] Trial 73 finished with value: 0.010985335042806866
and parameters: {'learning_rate': 0.3030478584687129, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.1970553792013293, 'subsample':
0.8841632145923842}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:03,155] Trial 74 finished with value: 0.011412688987724066
and parameters: {'learning_rate': 0.2964659113040187, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.20382244864176174, 'subsample':
0.8829540769528592}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:03,517] Trial 75 finished with value: 0.010017361018198346
and parameters: {'learning_rate': 0.30020770764387067, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.2005533244705299, 'subsample':
0.8832643248655313}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:03,896] Trial 76 finished with value: 0.009288791763761777
and parameters: {'learning_rate': 0.30602169899609516, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.19015153773253973, 'subsample':
0.8836931602976361}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:04,268] Trial 77 finished with value: 0.010989228670475089
and parameters: {'learning_rate': 0.31342481404259853, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.19316973379628483, 'subsample':
0.8826037977833521}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:04,634] Trial 78 finished with value: 0.009500830202131891
and parameters: {'learning_rate': 0.29145009195677696, 'max_depth': 10,
'n_estimators': 463, 'reg_lambda': 0.20598521686984117, 'subsample':
0.8846747704555642}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:05,016] Trial 79 finished with value: 0.009458679114440191
and parameters: {'learning_rate': 0.31595136648674405, 'max_depth': 8,
'n_estimators': 497, 'reg_lambda': 0.19543256831747488, 'subsample':
0.8840242884563209}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:05,370] Trial 80 finished with value: 0.010996387758041588
and parameters: {'learning_rate': 0.31119807330737714, 'max_depth': 9,
'n_estimators': 491, 'reg_lambda': 0.22415479023927523, 'subsample':
0.8838291380933484}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:05,769] Trial 81 finished with value: 0.009715595639456715
and parameters: {'learning_rate': 0.2971783609989517, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.20545115470606148, 'subsample':
0.8834336688782468}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:06,146] Trial 82 finished with value: 0.00886100300712582
and parameters: {'learning_rate': 0.2975401068192944, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.2090956336302462, 'subsample':
0.8830158069926641}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:06,510] Trial 83 finished with value: 0.00904820341798065
and parameters: {'learning_rate': 0.30205831737668226, 'max_depth': 8,
'n_estimators': 451, 'reg_lambda': 0.1962580863322929, 'subsample':
0.8823795227401585}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:06,927] Trial 84 finished with value: 0.008898148626993454
and parameters: {'learning_rate': 0.2885354263215456, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.21212837317441557, 'subsample':
0.883080540003313}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:07,303] Trial 85 finished with value: 0.009819874065063293
and parameters: {'learning_rate': 0.2894202635645687, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.2119033660088904, 'subsample':
0.8830911468951169}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:07,661] Trial 86 finished with value: 0.009544692039766515
and parameters: {'learning_rate': 0.28844258787218735, 'max_depth': 8,
'n_estimators': 448, 'reg_lambda': 0.2089658498195953, 'subsample':
0.8836163847771996}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:08,043] Trial 87 finished with value: 0.010454059287847808
and parameters: {'learning_rate': 0.29515964495301406, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.21726500399360146, 'subsample':
0.8829223750686386}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:08,417] Trial 88 finished with value: 0.010591849461265963
and parameters: {'learning_rate': 0.2930815355915934, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.2132146482063231, 'subsample':
0.8832422608986145}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:09,508] Trial 89 finished with value: 0.010863576189643684
and parameters: {'learning_rate': 0.29856303176042953, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.21445054985679557, 'subsample':
0.8827657817477308}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:11,488] Trial 90 finished with value: 0.011410741718568557
and parameters: {'learning_rate': 0.2997996024880589, 'max_depth': 7,
'n_estimators': 456, 'reg_lambda': 0.20927354122676453, 'subsample':
0.8845045173216779}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:13,419] Trial 91 finished with value: 0.009401218483470924
and parameters: {'learning_rate': 0.3043068210363525, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.21153124070672177, 'subsample':
0.8835516329007318}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:13,788] Trial 92 finished with value: 0.009965442378594518
and parameters: {'learning_rate': 0.2922089481523811, 'max_depth': 8,
'n_estimators': 499, 'reg_lambda': 0.2076780346243533, 'subsample':
0.8830381766352486}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:14,215] Trial 93 finished with value: 0.009954538880496112
and parameters: {'learning_rate': 0.293987583822622, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.2293258402940785, 'subsample':
0.88370126523908}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:14,595] Trial 94 finished with value: 0.01069694255458377
and parameters: {'learning_rate': 0.3097421153362479, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.2107702122562562, 'subsample':
0.8833148805163742}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:14,973] Trial 95 finished with value: 0.010966694821780925
and parameters: {'learning_rate': 0.31874671024056084, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.19775017029065098, 'subsample':
0.8841965384088408}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:15,372] Trial 96 finished with value: 0.008914205192236221
and parameters: {'learning_rate': 0.2973000803002011, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20258628520149938, 'subsample':
0.8839328606187887}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:15,733] Trial 97 finished with value: 0.00896413402215639
and parameters: {'learning_rate': 0.29650837688838516, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.2025224824167295, 'subsample':
0.8838941271546383}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:16,120] Trial 98 finished with value: 0.009950851638439912
and parameters: {'learning_rate': 0.29778527713162556, 'max_depth': 9,
'n_estimators': 479, 'reg_lambda': 0.20435315512502294, 'subsample':
0.8844009705366871}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:16,529] Trial 99 finished with value: 0.008670960452864794
and parameters: {'learning_rate': 0.29027423828608995, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.20626491037070285, 'subsample':
0.8839593840080819}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:16,913] Trial 100 finished with value: 0.010475006950182946
and parameters: {'learning_rate': 0.2908815738587248, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.20829395303861387, 'subsample':
0.8850538560426865}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:17,332] Trial 101 finished with value: 0.008489504920535585
and parameters: {'learning_rate': 0.28727885320312513, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.20673977032407242, 'subsample':
0.88414087009806}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:17,708] Trial 102 finished with value: 0.009961585295210 38
and parameters: {'learning_rate': 0.2860822577875913, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.2066535547890302, 'subsample':
0.8840844505410601}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:18,543] Trial 103 finished with value: 0.009898766134993743
and parameters: {'learning_rate': 0.2885922712650223, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.2105547641293708, 'subsample':
0.8837567640254635}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:20,178] Trial 104 finished with value: 0.009974640585165171
and parameters: {'learning_rate': 0.2875691184846906, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.193626923850937, 'subsample':
0.8842569778482247}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:22,713] Trial 105 finished with value: 0.010094933735052858
and parameters: {'learning_rate': 0.282078908692879, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.20746507875635256, 'subsample':
0.8808275479393708}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:23,095] Trial 106 finished with value: 0.008954889270223585
and parameters: {'learning_rate': 0.28732747146116555, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.20979864434121237, 'subsample':
0.8846150456025268}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:23,653] Trial 107 finished with value: 0.009607889413120227
and parameters: {'learning_rate': 0.2851628767706337, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.20620808474933586, 'subsample':
0.8847990391353544}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:25,543] Trial 108 finished with value: 0.00958237420890317
and parameters: {'learning_rate': 0.2905713502557899, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.1922030651187458, 'subsample':
0.883537639385802}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:27,049] Trial 109 finished with value: 0.008678663051345707
and parameters: {'learning_rate': 0.29411148010845684, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.1949553065109871, 'subsample':
0.8840913520317362}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:28,757] Trial 110 finished with value: 0.009307584537213217
and parameters: {'learning_rate': 0.2949698340130422, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.19508345503464838, 'subsample':
0.8841075857606994}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:29,152] Trial 111 finished with value: 0.008411194970700676
and parameters: {'learning_rate': 0.29215191669084617, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.19659571020934336, 'subsample':
0.8843292874905663}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:29,558] Trial 112 finished with value: 0.008607306376496761
and parameters: {'learning_rate': 0.2922495668633397, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.19477240461699322, 'subsample':
0.8839633341556202}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:29,959] Trial 113 finished with value: 0.008777245710716742
and parameters: {'learning_rate': 0.2923727093761471, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.19446506492388213, 'subsample':
0.8842962416125086}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:30,345] Trial 114 finished with value: 0.009502137702700806
and parameters: {'learning_rate': 0.29206015269508634, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.1940064640790892, 'subsample':
0.8842815768936128}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:30,723] Trial 115 finished with value: 0.008308966635861418
and parameters: {'learning_rate': 0.28999798170800767, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.19497890795804276, 'subsample':
0.8840214122690117}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:31,134] Trial 116 finished with value: 0.008544919168381925
and parameters: {'learning_rate': 0.2903647924494151, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.19729439563045803, 'subsample':
0.8839340491305547}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:31,522] Trial 117 finished with value: 0.008926852487385211
and parameters: {'learning_rate': 0.2894481972380785, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.19631716230773386, 'subsample':
0.8838184272704784}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:31,918] Trial 118 finished with value: 0.008746781507065966
and parameters: {'learning_rate': 0.29349164045551873, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.19712397156077088, 'subsample':
0.883994246033624}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:32,308] Trial 119 finished with value: 0.00898354042405641
and parameters: {'learning_rate': 0.29344799427611673, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.19700105787061525, 'subsample':
0.8839962926709293}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:32,691] Trial 120 finished with value: 0.009034113170478688
and parameters: {'learning_rate': 0.2905523163837047, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.19496083221711838, 'subsample':
0.8841153352518244}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:33,102] Trial 121 finished with value: 0.010069993158165553
and parameters: {'learning_rate': 0.29108749112341376, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.19885812284703822, 'subsample':
0.8838176104458301}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:33,497] Trial 122 finished with value: 0.009756754262336546
and parameters: {'learning_rate': 0.29633103667995736, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.19732910407750318, 'subsample':
0.8839658512127311}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:33,922] Trial 123 finished with value: 0.009366501881955274
and parameters: {'learning_rate': 0.2935395146149234, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.1981792497174192, 'subsample':
0.8837243588505898}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:34,316] Trial 124 finished with value: 0.009278935358810048
and parameters: {'learning_rate': 0.2898070032296277, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.1962172239850642, 'subsample':
0.8841906433848615}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:34,710] Trial 125 finished with value: 0.009623072852551554
and parameters: {'learning_rate': 0.29180883708764394, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.19217920585868786, 'subsample':
0.8845366056549547}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:35,114] Trial 126 finished with value: 0.009206306131452095
and parameters: {'learning_rate': 0.2948525014199872, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.19507702385411493, 'subsample':
0.8835834121580809}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:35,489] Trial 127 finished with value: 0.010434593816254348
and parameters: {'learning_rate': 0.2956394315776895, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.19338703007570607, 'subsample':
0.884415037494706}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:35,864] Trial 128 finished with value: 0.010001190213885553
and parameters: {'learning_rate': 0.2870209894468407, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.2005467545012957, 'subsample':
0.8856327447825535}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:36,273] Trial 129 finished with value: 0.009450653528913644
and parameters: {'learning_rate': 0.2840597853489205, 'max_depth': 8,
'n_estimators': 468, 'reg_lambda': 0.19730406157375088, 'subsample':
0.8840446506152102}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:36,668] Trial 130 finished with value: 0.008696971429741686
and parameters: {'learning_rate': 0.2823977425146087, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.19909877836263037, 'subsample':
0.8838454514781854}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:37,091] Trial 131 finished with value: 0.009072813573621335
and parameters: {'learning_rate': 0.2854496702494112, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.19930364734998945, 'subsample':
0.8839273722726713}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:37,476] Trial 132 finished with value: 0.008831895784995882
and parameters: {'learning_rate': 0.28230652855967336, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.19602303259129117, 'subsample':
0.8836655466365269}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:37,851] Trial 133 finished with value: 0.009845906885562635
and parameters: {'learning_rate': 0.2810955874585952, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.19818736020498212, 'subsample':
0.8838407594252355}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:38,246] Trial 134 finished with value: 0.010283401396635373
and parameters: {'learning_rate': 0.2889134825732507, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.19410113040582558, 'subsample':
0.8834496104452692}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:38,865] Trial 135 finished with value: 0.010223583782656255
and parameters: {'learning_rate': 0.2834030579162894, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.19662247146257067, 'subsample':
0.8841229143556135}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:40,210] Trial 136 finished with value: 0.009102215100906225
and parameters: {'learning_rate': 0.28029127663808145, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.2004197968466824, 'subsample':
0.8843072937639024}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:41,777] Trial 137 finished with value: 0.008635050228235066
and parameters: {'learning_rate': 0.28281762250338205, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.2033881011513567, 'subsample':
0.8836956489320278}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:43,547] Trial 138 finished with value: 0.009403343292799045
and parameters: {'learning_rate': 0.29279799910219256, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.2033269056959376, 'subsample':
0.883607861536586}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:43,930] Trial 139 finished with value: 0.008480454379039108
and parameters: {'learning_rate': 0.2903937053512339, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20524427400382966, 'subsample':
0.8839927321708466}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:44,354] Trial 140 finished with value: 0.009655199048505649
and parameters: {'learning_rate': 0.29024143028307936, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.2042257026078399, 'subsample':
0.8837598618981107}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:44,725] Trial 141 finished with value: 0.008503221103566485
and parameters: {'learning_rate': 0.2913706326307573, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20568046184247007, 'subsample':
0.883918500972021}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:45,109] Trial 142 finished with value: 0.008790427212182001
and parameters: {'learning_rate': 0.29136716778001437, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.20511604757105958, 'subsample':
0.8839343918893531}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:45,527] Trial 143 finished with value: 0.008903741194195357
and parameters: {'learning_rate': 0.2878244745404991, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.2049363371701156, 'subsample':
0.8841909541953853}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:45,920] Trial 144 finished with value: 0.008844464603333275
and parameters: {'learning_rate': 0.2889961071760088, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.2060369024724751, 'subsample':
0.884082399806491}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:46,337] Trial 145 finished with value: 0.009761107920963272
and parameters: {'learning_rate': 0.2918983513638329, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20170058497142063, 'subsample':
0.8834649567426361}. Best is trial 68 with value: 0.008290941933048327.

[I 2024-08-30 19:49:46,732] Trial 146 finished with value: 0.008821496942593926
and parameters: {'learning_rate': 0.28254781262637263, 'max_depth': 8,
'n_estimators': 429, 'reg_lambda': 0.2066871887663353, 'subsample':
0.8838579092568459}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:47,110] Trial 147 finished with value: 0.009545034811540499
and parameters: {'learning_rate': 0.2994866791866008, 'max_depth': 8,
'n_estimators': 466, 'reg_lambda': 0.20318495190567434, 'subsample':
0.8836963762158567}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:47,547] Trial 148 finished with value: 0.009524138761709804
and parameters: {'learning_rate': 0.29414101299975426, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.20530056835729033, 'subsample':
0.8843809526580483}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:47,907] Trial 149 finished with value: 0.010929739796379756
and parameters: {'learning_rate': 0.32237936220526114, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20383676602935852, 'subsample':
0.8842165505448075}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:48,290] Trial 150 finished with value: 0.009027557180437656
and parameters: {'learning_rate': 0.30104001592228663, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.1955820601611025, 'subsample':
0.8832939243528553}. Best is trial 68 with value: 0.008290941933048327.
[I 2024-08-30 19:49:48,716] Trial 151 finished with value: 0.008165294642117002
and parameters: {'learning_rate': 0.2903410054812247, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.19759712664755047, 'subsample':
0.8839552282830239}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:49,099] Trial 152 finished with value: 0.009935253374135249
and parameters: {'learning_rate': 0.2906539238566453, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.194957262296345, 'subsample':
0.8839177292494924}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:49,496] Trial 153 finished with value: 0.009759502514746539
and parameters: {'learning_rate': 0.2882077822265006, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20579824063672647, 'subsample':
0.8840224765708937}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:49,866] Trial 154 finished with value: 0.008971856045695137
and parameters: {'learning_rate': 0.2897276748711491, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.19283623168106262, 'subsample':
0.8836536546934051}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:50,251] Trial 155 finished with value: 0.009742477581922168
and parameters: {'learning_rate': 0.28583113787523023, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.2069653298560081, 'subsample':
0.8859397615979486}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:50,654] Trial 156 finished with value: 0.009107880295582462
and parameters: {'learning_rate': 0.2913692174044699, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.19764541177784675, 'subsample':
0.8838031570020076}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:51,049] Trial 157 finished with value: 0.008695620061484697
and parameters: {'learning_rate': 0.2925720818905918, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20470081465527115, 'subsample':
0.8841527469310297}. Best is trial 151 with value: 0.008165294642117002.

[I 2024-08-30 19:49:51,435] Trial 158 finished with value: 0.009386334659354985
and parameters: {'learning_rate': 0.292850790719168, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20459963205787549, 'subsample':
0.8841383024757036}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:51,836] Trial 159 finished with value: 0.010064693090872743
and parameters: {'learning_rate': 0.29239588855331633, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.2038147126343239, 'subsample':
0.884576844127735}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:52,234] Trial 160 finished with value: 0.009409816104643271
and parameters: {'learning_rate': 0.29467396895723036, 'max_depth': 8,
'n_estimators': 467, 'reg_lambda': 0.2061678169097592, 'subsample':
0.8842971342498196}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:52,659] Trial 161 finished with value: 0.008234737599097697
and parameters: {'learning_rate': 0.2899993442275812, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20766456521766344, 'subsample':
0.8839815552537411}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:53,049] Trial 162 finished with value: 0.008296432240107822
and parameters: {'learning_rate': 0.2904244867908321, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20794028916440496, 'subsample':
0.8840342944298629}. Best is trial 151 with value: 0.008165294642117002.
[I 2024-08-30 19:49:53,589] Trial 163 finished with value: 0.00786668295996883
and parameters: {'learning_rate': 0.2898472962478556, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20781891960126028, 'subsample':
0.8839879096985317}. Best is trial 163 with value: 0.00786668295996883.
[I 2024-08-30 19:49:55,508] Trial 164 finished with value: 0.009692633774901378
and parameters: {'learning_rate': 0.28944742710796045, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20738654753130373, 'subsample':
0.8835472005098518}. Best is trial 163 with value: 0.00786668295996883.
[I 2024-08-30 19:49:58,049] Trial 165 finished with value: 0.008990258472038824
and parameters: {'learning_rate': 0.2873544020501319, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20749082614890238, 'subsample':
0.8840099472778611}. Best is trial 163 with value: 0.00786668295996883.
[I 2024-08-30 19:49:58,424] Trial 166 finished with value: 0.010134368218956523
and parameters: {'learning_rate': 0.290450654858997, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.20891766266182663, 'subsample':
0.8837365446114256}. Best is trial 163 with value: 0.00786668295996883.
[I 2024-08-30 19:49:58,789] Trial 167 finished with value: 0.00925216026143113
and parameters: {'learning_rate': 0.28856780412435923, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.208739531077552, 'subsample':
0.8839302188119296}. Best is trial 163 with value: 0.00786668295996883.
[I 2024-08-30 19:49:59,192] Trial 168 finished with value: 0.007682871903035849
and parameters: {'learning_rate': 0.28992357110185796, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.20813316488839653, 'subsample':
0.8840040952683937}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:49:59,577] Trial 169 finished with value: 0.009530467274687765
and parameters: {'learning_rate': 0.2892997862123543, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.2083617707074489, 'subsample':
0.8842264940797716}. Best is trial 168 with value: 0.007682871903035849.

[I 2024-08-30 19:49:59,963] Trial 170 finished with value: 0.009920293834022195
and parameters: {'learning_rate': 0.2913217300319319, 'max_depth': 8,
'n_estimators': 463, 'reg_lambda': 0.20804336970204756, 'subsample':
0.8844310608437774}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:00,448] Trial 171 finished with value: 0.009748170991411823
and parameters: {'learning_rate': 0.286625429772265, 'max_depth': 8,
'n_estimators': 498, 'reg_lambda': 0.2063699845110439, 'subsample':
0.8840304984397916}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:00,878] Trial 172 finished with value: 0.008049867618594124
and parameters: {'learning_rate': 0.2904728470073289, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.20694217510652801, 'subsample':
0.8839065486733699}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:01,342] Trial 173 finished with value: 0.00969030549192786
and parameters: {'learning_rate': 0.29018480708376804, 'max_depth': 8,
'n_estimators': 462, 'reg_lambda': 0.2093643997811807, 'subsample':
0.8838378468865716}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:01,722] Trial 174 finished with value: 0.010307682081750657
and parameters: {'learning_rate': 0.2878816862893882, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.20799424175300643, 'subsample':
0.8837241328685294}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:02,145] Trial 175 finished with value: 0.009111084928529155
and parameters: {'learning_rate': 0.29131890381240555, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.20702489360917634, 'subsample':
0.8840832742853497}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:02,533] Trial 176 finished with value: 0.010621701711416536
and parameters: {'learning_rate': 0.29003194187035153, 'max_depth': 8,
'n_estimators': 454, 'reg_lambda': 0.21026041080348143, 'subsample':
0.883919802379982}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:02,912] Trial 177 finished with value: 0.01145190494289712
and parameters: {'learning_rate': 0.28883998134012784, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.20539900267149075, 'subsample':
0.8835928861856899}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:03,326] Trial 178 finished with value: 0.009791727414173883
and parameters: {'learning_rate': 0.2920644067846775, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.2080741777646001, 'subsample':
0.884240457632673}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:03,714] Trial 179 finished with value: 0.01019305387716751
and parameters: {'learning_rate': 0.29120331827199425, 'max_depth': 8,
'n_estimators': 461, 'reg_lambda': 0.20726714212386393, 'subsample':
0.8814567672044304}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:04,126] Trial 180 finished with value: 0.008831349511076395
and parameters: {'learning_rate': 0.2867749888443893, 'max_depth': 8,
'n_estimators': 464, 'reg_lambda': 0.20567319693695194, 'subsample':
0.8837736614014131}. Best is trial 168 with value: 0.007682871903035849.
[I 2024-08-30 19:50:04,515] Trial 181 finished with value: 0.009473179439610225
and parameters: {'learning_rate': 0.2902090157079308, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.2061323629331742, 'subsample':
0.8800910502884992}. Best is trial 168 with value: 0.007682871903035849.

[I 2024-08-30 19:50:04,914] Trial 182 finished with value: 0.007352275525527465
and parameters: {'learning_rate': 0.28921949815644976, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20696640631618968, 'subsample':
0.8839239629197994}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:05,348] Trial 183 finished with value: 0.009609023335532423
and parameters: {'learning_rate': 0.2880166754119848, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.2066058008653004, 'subsample':
0.8840109706194936}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:05,715] Trial 184 finished with value: 0.010342991519042147
and parameters: {'learning_rate': 0.28906322086261776, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.2096863086501863, 'subsample':
0.8838873803380322}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:06,114] Trial 185 finished with value: 0.008545946409411656
and parameters: {'learning_rate': 0.28953645569898423, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.20809306376923256, 'subsample':
0.8841148008932959}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:06,535] Trial 186 finished with value: 0.008596506158015946
and parameters: {'learning_rate': 0.2893230736129502, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20801954292971717, 'subsample':
0.8841504056188998}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:06,915] Trial 187 finished with value: 0.008973286339783691
and parameters: {'learning_rate': 0.28942890970744883, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20873617379712392, 'subsample':
0.8843177809657352}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:07,357] Trial 188 finished with value: 0.00988136038825454
and parameters: {'learning_rate': 0.2906441251485793, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20802916825092269, 'subsample':
0.8841668332378979}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:07,747] Trial 189 finished with value: 0.010485386042104722
and parameters: {'learning_rate': 0.2882748666651594, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.21132936949194986, 'subsample':
0.8841113735579977}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:08,341] Trial 190 finished with value: 0.009096949788552668
and parameters: {'learning_rate': 0.2876097578700768, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.20722711458580234, 'subsample':
0.884395923838924}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:09,828] Trial 191 finished with value: 0.009766890526578286
and parameters: {'learning_rate': 0.29115308183992405, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20867904160237916, 'subsample':
0.8840215772624346}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:12,711] Trial 192 finished with value: 0.009788208858098836
and parameters: {'learning_rate': 0.28988444265414526, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20963033240415063, 'subsample':
0.8839305381199211}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:13,084] Trial 193 finished with value: 0.009229471075554193
and parameters: {'learning_rate': 0.29205688383618783, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.1960093533988829, 'subsample':
0.8841614073892474}. Best is trial 182 with value: 0.007352275525527465.

[I 2024-08-30 19:50:13,486] Trial 194 finished with value: 0.009335547898770186
and parameters: {'learning_rate': 0.288982095943722, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20737288847906124, 'subsample':
0.8838056904553262}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:13,864] Trial 195 finished with value: 0.009124849383181593
and parameters: {'learning_rate': 0.2929971048921572, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.1943815530297802, 'subsample':
0.8840405818455892}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:14,256] Trial 196 finished with value: 0.008407203173059366
and parameters: {'learning_rate': 0.2901729437052916, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.20797336829170618, 'subsample':
0.8842329849255106}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:14,662] Trial 197 finished with value: 0.008339789945631301
and parameters: {'learning_rate': 0.29097659428272726, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20834072584158603, 'subsample':
0.8845218093106143}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:15,049] Trial 198 finished with value: 0.009221046597812007
and parameters: {'learning_rate': 0.28972897758447363, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20821457162672202, 'subsample':
0.884496210378121}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:15,425] Trial 199 finished with value: 0.00938503148209955
and parameters: {'learning_rate': 0.290864625613782, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2090960043626388, 'subsample':
0.8846333890314624}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:15,826] Trial 200 finished with value: 0.009446886711957566
and parameters: {'learning_rate': 0.2886228244892961, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.2103877210586638, 'subsample':
0.8843044059237847}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:16,203] Trial 201 finished with value: 0.009774097912905866
and parameters: {'learning_rate': 0.2914086648780013, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20680850023284014, 'subsample':
0.8841862555288073}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:16,610] Trial 202 finished with value: 0.008911202915023874
and parameters: {'learning_rate': 0.2901183501476584, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.20770961932848464, 'subsample':
0.884332874484445}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:17,000] Trial 203 finished with value: 0.008792139286161257
and parameters: {'learning_rate': 0.29220441538425407, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.19644937466594717, 'subsample':
0.88404712279421}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:17,398] Trial 204 finished with value: 0.009457279524292801
and parameters: {'learning_rate': 0.2871086636191296, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20690705176229449, 'subsample':
0.8838906605981159}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:17,799] Trial 205 finished with value: 0.00751082989326399
and parameters: {'learning_rate': 0.28933268690275205, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.22110514112911994, 'subsample':
0.8842218152632824}. Best is trial 182 with value: 0.007352275525527465.

[I 2024-08-30 19:50:18,185] Trial 206 finished with value: 0.009972351093694171 and parameters: {'learning_rate': 0.28919949247738613, 'max_depth': 8, 'n_estimators': 482, 'reg_lambda': 0.20875949894806364, 'subsample': 0.8842746286672672}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:18,574] Trial 207 finished with value: 0.008960252137625744 and parameters: {'learning_rate': 0.29067182800946445, 'max_depth': 8, 'n_estimators': 483, 'reg_lambda': 0.2217100884668399, 'subsample': 0.8844104505175373}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:18,997] Trial 208 finished with value: 0.010017547066254934 and parameters: {'learning_rate': 0.28800298638136523, 'max_depth': 8, 'n_estimators': 484, 'reg_lambda': 0.21583909731664427, 'subsample': 0.8841623389349739}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:19,400] Trial 209 finished with value: 0.009389540676958505 and parameters: {'learning_rate': 0.28940654597435256, 'max_depth': 8, 'n_estimators': 485, 'reg_lambda': 0.2076470438196467, 'subsample': 0.8845578674982876}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:19,794] Trial 210 finished with value: 0.008225074512063986 and parameters: {'learning_rate': 0.2883537677842682, 'max_depth': 8, 'n_estimators': 491, 'reg_lambda': 0.2279907056494495, 'subsample': 0.8847086617370613}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:20,187] Trial 211 finished with value: 0.008421331165524251 and parameters: {'learning_rate': 0.288466023578499, 'max_depth': 8, 'n_estimators': 492, 'reg_lambda': 0.22629044328430592, 'subsample': 0.8840662618376953}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:20,599] Trial 212 finished with value: 0.008787123351472179 and parameters: {'learning_rate': 0.28686779395424683, 'max_depth': 8, 'n_estimators': 494, 'reg_lambda': 0.22653636222859347, 'subsample': 0.884756629351877}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:21,059] Trial 213 finished with value: 0.009728371825994465 and parameters: {'learning_rate': 0.2881685900317961, 'max_depth': 8, 'n_estimators': 492, 'reg_lambda': 0.22871058990647508, 'subsample': 0.8848298384765486}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:21,471] Trial 214 finished with value: 0.00881570582052317 and parameters: {'learning_rate': 0.2862047112074216, 'max_depth': 8, 'n_estimators': 489, 'reg_lambda': 0.22685213688551936, 'subsample': 0.8845097880293422}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:21,898] Trial 215 finished with value: 0.009645494760597189 and parameters: {'learning_rate': 0.28511686617417625, 'max_depth': 8, 'n_estimators': 491, 'reg_lambda': 0.22875077043850672, 'subsample': 0.8839980793512165}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:22,306] Trial 216 finished with value: 0.007871543531444454 and parameters: {'learning_rate': 0.29026538000260893, 'max_depth': 8, 'n_estimators': 487, 'reg_lambda': 0.22718522419141574, 'subsample': 0.8842475285298855}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:22,798] Trial 217 finished with value: 0.010462076874945771 and parameters: {'learning_rate': 0.2904290461424405, 'max_depth': 8, 'n_estimators': 486, 'reg_lambda': 0.22421842148046348, 'subsample': 0.8849781620766135}. Best is trial 182 with value: 0.007352275525527465.

[I 2024-08-30 19:50:24,254] Trial 218 finished with value: 0.009861173894142858
and parameters: {'learning_rate': 0.29134293147975066, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.227839683195051, 'subsample':
0.8846514800020813}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:25,956] Trial 219 finished with value: 0.008956608929388198
and parameters: {'learning_rate': 0.28836263965425785, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.22632557907523215, 'subsample':
0.8842737569847696}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:27,773] Trial 220 finished with value: 0.010053853286791797
and parameters: {'learning_rate': 0.2899796747404686, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.22532800274574943, 'subsample':
0.8844442193051629}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:28,177] Trial 221 finished with value: 0.010447393953429392
and parameters: {'learning_rate': 0.2906053151493298, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.22739358134659513, 'subsample':
0.8840679996544027}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:28,562] Trial 222 finished with value: 0.009132281576879751
and parameters: {'learning_rate': 0.28874941621369854, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.22504891954664696, 'subsample':
0.8838672689738323}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:28,935] Trial 223 finished with value: 0.010020438219353051
and parameters: {'learning_rate': 0.2874278793725428, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20667547420013843, 'subsample':
0.8842437941511148}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:29,354] Trial 224 finished with value: 0.0087833776824056
and parameters: {'learning_rate': 0.28978762665267277, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.22254062077227463, 'subsample':
0.8840821688274191}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:29,735] Trial 225 finished with value: 0.010679083815896351
and parameters: {'learning_rate': 0.29132149255422296, 'max_depth': 8,
'n_estimators': 498, 'reg_lambda': 0.228382970218761, 'subsample':
0.8839462530835566}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:30,119] Trial 226 finished with value: 0.009539830233396482
and parameters: {'learning_rate': 0.28898384370032854, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.22078341905328833, 'subsample':
0.8841658156933819}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:30,545] Trial 227 finished with value: 0.00955744503113002
and parameters: {'learning_rate': 0.2903542255051772, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.22556534524309282, 'subsample':
0.8838031362325248}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:30,939] Trial 228 finished with value: 0.009672109741638298
and parameters: {'learning_rate': 0.29326292029092915, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.21774134218615776, 'subsample':
0.8839763117891705}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:31,371] Trial 229 finished with value: 0.009435002913674695
and parameters: {'learning_rate': 0.29188373460352823, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.22758325206842508, 'subsample':
0.8842973405811754}. Best is trial 182 with value: 0.007352275525527465.

[I 2024-08-30 19:50:31,769] Trial 230 finished with value: 0.008859153469641312
and parameters: {'learning_rate': 0.2879271272663527, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.22924878254103864, 'subsample':
0.8840812251647651}. Best is trial 182 with value: 0.007352275525527465.
[I 2024-08-30 19:50:32,159] Trial 231 finished with value: 0.007239166067627477
and parameters: {'learning_rate': 0.28932687186567757, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20784360095091955, 'subsample':
0.8841831521812279}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:32,599] Trial 232 finished with value: 0.010893145779602084
and parameters: {'learning_rate': 0.28940116169874464, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.2055814550737829, 'subsample':
0.8843865792629398}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:32,986] Trial 233 finished with value: 0.011615672608254968
and parameters: {'learning_rate': 0.29073283754061335, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20917145356445088, 'subsample':
0.8841922457288941}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:33,415] Trial 234 finished with value: 0.007535427513006926
and parameters: {'learning_rate': 0.28972929048180585, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20806859265376262, 'subsample':
0.8839699396886657}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:33,861] Trial 235 finished with value: 0.00974641357383691
and parameters: {'learning_rate': 0.2889098956523217, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.20797351263070918, 'subsample':
0.8839301333063893}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:34,274] Trial 236 finished with value: 0.00980437437357456
and parameters: {'learning_rate': 0.2898488724103682, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.2100247897992919, 'subsample':
0.8840248861372936}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:34,722] Trial 237 finished with value: 0.009603806156344395
and parameters: {'learning_rate': 0.287328187140116, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.20722171633210115, 'subsample':
0.8841064694453095}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:35,126] Trial 238 finished with value: 0.008687864048780884
and parameters: {'learning_rate': 0.29141156322050127, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.2088690539457981, 'subsample':
0.8838883243799452}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:35,545] Trial 239 finished with value: 0.008611625672553731
and parameters: {'learning_rate': 0.2884664557321412, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20822209678741546, 'subsample':
0.8842757955850962}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:35,932] Trial 240 finished with value: 0.009497122254987507
and parameters: {'learning_rate': 0.2897960583448324, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.19682264287154777, 'subsample':
0.8841505496821053}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:36,332] Trial 241 finished with value: 0.008220063908943158
and parameters: {'learning_rate': 0.2907142603338997, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20652001551679494, 'subsample':
0.8838550316702583}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:50:36,748] Trial 242 finished with value: 0.008905251734892887
and parameters: {'learning_rate': 0.29072098786679473, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20640082647406646, 'subsample':
0.8837565369209242}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:37,136] Trial 243 finished with value: 0.008848466152294005
and parameters: {'learning_rate': 0.29213745680816744, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20737717914360723, 'subsample':
0.883973328269067}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:37,561] Trial 244 finished with value: 0.009481704869854904
and parameters: {'learning_rate': 0.28930723621048504, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.19560376960249917, 'subsample':
0.8838421666760209}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:38,540] Trial 245 finished with value: 0.010019043526144841
and parameters: {'learning_rate': 0.29031484368581034, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.21915636103657, 'subsample':
0.8840528796646244}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:40,506] Trial 246 finished with value: 0.009724837006347 86
and parameters: {'learning_rate': 0.29075557511736017, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.20823869220826108, 'subsample':
0.8838482141737417}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:42,528] Trial 247 finished with value: 0.009532106666443997
and parameters: {'learning_rate': 0.28840699349083054, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.20673547100552225, 'subsample':
0.8842038667149598}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:42,945] Trial 248 finished with value: 0.007843605433927658
and parameters: {'learning_rate': 0.2898066083136787, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.2060164013038059, 'subsample':
0.8839581103971494}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:43,341] Trial 249 finished with value: 0.009102436319620303
and parameters: {'learning_rate': 0.2918520253985763, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20571297126107516, 'subsample':
0.8839461439303129}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:43,727] Trial 250 finished with value: 0.008962475002790283
and parameters: {'learning_rate': 0.29130174219375077, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.2051095971919676, 'subsample':
0.8836834055970948}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:44,123] Trial 251 finished with value: 0.007914326289010423
and parameters: {'learning_rate': 0.2899006637449803, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20628403765226067, 'subsample':
0.8839936834980361}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:44,519] Trial 252 finished with value: 0.008515056974012085
and parameters: {'learning_rate': 0.28791359356975615, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20597033836661885, 'subsample':
0.8843691105996077}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:44,941] Trial 253 finished with value: 0.007662700931239697
and parameters: {'learning_rate': 0.2892000747995825, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.20665122458521154, 'subsample':
0.8840230425398248}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:50:45,360] Trial 254 finished with value: 0.010858863422105229
and parameters: {'learning_rate': 0.28686742614085603, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20709382371774138, 'subsample':
0.884048403377925}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:45,764] Trial 255 finished with value: 0.008033962776886725
and parameters: {'learning_rate': 0.28894464199649106, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.20654441296790202, 'subsample':
0.8845224138594202}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:46,178] Trial 256 finished with value: 0.01070476037489608
and parameters: {'learning_rate': 0.28904556752194077, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.20748796498533553, 'subsample':
0.8843572052218254}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:46,573] Trial 257 finished with value: 0.010079542966657917
and parameters: {'learning_rate': 0.28988355509474234, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.2064078866725405, 'subsample':
0.8847366672905888}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:47,004] Trial 258 finished with value: 0.008438503954417755
and parameters: {'learning_rate': 0.28863837906609796, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.20480253175049185, 'subsample':
0.8837859649470374}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:47,403] Trial 259 finished with value: 0.008470671527832544
and parameters: {'learning_rate': 0.28813926368332343, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.22736292218812623, 'subsample':
0.8845942811022998}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:47,796] Trial 260 finished with value: 0.008879914091995738
and parameters: {'learning_rate': 0.288847062868296, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.20735114813055017, 'subsample':
0.8844747572492587}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:48,184] Trial 261 finished with value: 0.010110339662611283
and parameters: {'learning_rate': 0.31788570480502637, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.22977092030511437, 'subsample':
0.884861635933597}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:48,582] Trial 262 finished with value: 0.009965521911237344
and parameters: {'learning_rate': 0.28945675153675354, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20911862945810475, 'subsample':
0.8804774106053693}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:49,001] Trial 263 finished with value: 0.008995004350129154
and parameters: {'learning_rate': 0.286189207284825, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.20843969888726804, 'subsample':
0.883802411352458}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:49,397] Trial 264 finished with value: 0.00996549202284846
and parameters: {'learning_rate': 0.28845376336423306, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.20624391178722717, 'subsample':
0.8836977462624579}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:49,771] Trial 265 finished with value: 0.00972053725797338
and parameters: {'learning_rate': 0.3151676808145405, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20477949548647284, 'subsample':
0.8845285149567433}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:50:50,198] Trial 266 finished with value: 0.0094985479519184
and parameters: {'learning_rate': 0.2901193336414123, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20690134969961205, 'subsample':
0.8847008218137344}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:50,594] Trial 267 finished with value: 0.010889798101208222
and parameters: {'learning_rate': 0.28733613052301227, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.20773333003304248, 'subsample':
0.8820467412277956}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:50,998] Trial 268 finished with value: 0.008812313007998706
and parameters: {'learning_rate': 0.2891762134421028, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.20583109467889826, 'subsample':
0.8842459133346752}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:51,414] Trial 269 finished with value: 0.008691805449494688
and parameters: {'learning_rate': 0.29071990562698785, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.20944631602125605, 'subsample':
0.8838654392926318}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:51,817] Trial 270 finished with value: 0.009674319826678206
and parameters: {'learning_rate': 0.29287466829535685, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20842867277751212, 'subsample':
0.8840274709620993}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:52,237] Trial 271 finished with value: 0.0095881879342314
and parameters: {'learning_rate': 0.28808631954353847, 'max_depth': 8,
'n_estimators': 496, 'reg_lambda': 0.2065862509343556, 'subsample':
0.883764028319041}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:52,868] Trial 272 finished with value: 0.010543134647777742
and parameters: {'learning_rate': 0.32502307518249374, 'max_depth': 8,
'n_estimators': 434, 'reg_lambda': 0.20747955040657134, 'subsample':
0.8842083816715122}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:54,305] Trial 273 finished with value: 0.008391674209305495
and parameters: {'learning_rate': 0.2897161968061244, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.1952743988680684, 'subsample':
0.8839482728518399}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:55,804] Trial 274 finished with value: 0.00836320560619802
and parameters: {'learning_rate': 0.2898067673259621, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.2279720487719393, 'subsample':
0.8843970597988814}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:57,653] Trial 275 finished with value: 0.008763096755637863
and parameters: {'learning_rate': 0.2899339921000243, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.22801557922049706, 'subsample':
0.8844044514497608}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:58,032] Trial 276 finished with value: 0.008705936093357793
and parameters: {'learning_rate': 0.29156244205483856, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.22676131098925073, 'subsample':
0.8845154124543572}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:58,461] Trial 277 finished with value: 0.009013519207486156
and parameters: {'learning_rate': 0.2906339644254721, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.22999689757254732, 'subsample':
0.8843133892106093}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:50:58,854] Trial 278 finished with value: 0.011328790732746851
and parameters: {'learning_rate': 0.28997451079644704, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.22901069491290824, 'subsample':
0.8846234323483246}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:59,244] Trial 279 finished with value: 0.008946700507842442
and parameters: {'learning_rate': 0.289135665915941, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.22421561187770067, 'subsample':
0.8841054606734076}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:50:59,685] Trial 280 finished with value: 0.010753794006118035
and parameters: {'learning_rate': 0.2923759410464544, 'max_depth': 7,
'n_estimators': 486, 'reg_lambda': 0.22793152990424603, 'subsample':
0.8842296926882333}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:00,064] Trial 281 finished with value: 0.010048084121363094
and parameters: {'learning_rate': 0.29111200993686726, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.22612550735438605, 'subsample':
0.884417281181802}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:00,485] Trial 282 finished with value: 0.00848735708819728
and parameters: {'learning_rate': 0.28957189425855523, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.19375717224036623, 'subsample':
0.8839514002743079}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:00,876] Trial 283 finished with value: 0.008703259466484559
and parameters: {'learning_rate': 0.28763100638589073, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.22714675457050798, 'subsample':
0.8841131891187811}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:01,261] Trial 284 finished with value: 0.009035218452367986
and parameters: {'learning_rate': 0.2908372975912698, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.19532745783301392, 'subsample':
0.8840309697249992}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:01,670] Trial 285 finished with value: 0.009280203649775663
and parameters: {'learning_rate': 0.2887834551080369, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.21445283336753246, 'subsample':
0.8843306694056239}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:02,051] Trial 286 finished with value: 0.00910917317944486
and parameters: {'learning_rate': 0.2916292938000132, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.21251579608450544, 'subsample':
0.8839224358730348}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:02,440] Trial 287 finished with value: 0.010157233537553307
and parameters: {'learning_rate': 0.28985202819454686, 'max_depth': 8,
'n_estimators': 500, 'reg_lambda': 0.21064301206990946, 'subsample':
0.8841932556467009}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:02,835] Trial 288 finished with value: 0.010235156283982577
and parameters: {'learning_rate': 0.2926586136166591, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20971936835243946, 'subsample':
0.8844382442012861}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:03,223] Trial 289 finished with value: 0.010327968556330195
and parameters: {'learning_rate': 0.28777484851210433, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.20863212643883985, 'subsample':
0.8840667348008924}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:03,657] Trial 290 finished with value: 0.008695506416355685
and parameters: {'learning_rate': 0.29061334363467317, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.22325744376030013, 'subsample':
0.8838925340686612}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:04,039] Trial 291 finished with value: 0.008825712776627139
and parameters: {'learning_rate': 0.2890895142765792, 'max_depth': 8,
'n_estimators': 445, 'reg_lambda': 0.22822821222159118, 'subsample':
0.8845996158545044}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:04,430] Trial 292 finished with value: 0.010074369555447152
and parameters: {'learning_rate': 0.2867742878904917, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.2078854795757736, 'subsample':
0.8842860491473565}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:04,858] Trial 293 finished with value: 0.008334136357156165
and parameters: {'learning_rate': 0.28992172507200625, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.19088162421790766, 'subsample':
0.8841466540493177}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:05,269] Trial 294 finished with value: 0.008641283588717814
and parameters: {'learning_rate': 0.2915003438673098, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.19053812641235618, 'subsample':
0.8836349710635095}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:05,679] Trial 295 finished with value: 0.009434198095316834
and parameters: {'learning_rate': 0.29003794969014296, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.21924521771992064, 'subsample':
0.8841799022033446}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:06,080] Trial 296 finished with value: 0.011250695544304691
and parameters: {'learning_rate': 0.29330928067024575, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.19318683308371096, 'subsample':
0.8844781628151062}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:06,491] Trial 297 finished with value: 0.009224196738712137
and parameters: {'learning_rate': 0.2896925292564358, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.19158498882599884, 'subsample':
0.8847298447848421}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:06,908] Trial 298 finished with value: 0.00869781854392887
and parameters: {'learning_rate': 0.29196835588857767, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20733902419243785, 'subsample':
0.8839577730840688}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:07,305] Trial 299 finished with value: 0.008852641039207427
and parameters: {'learning_rate': 0.2907838125928481, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.20677235068141983, 'subsample':
0.8843308801650017}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:08,825] Trial 300 finished with value: 0.008611498917879837
and parameters: {'learning_rate': 0.2892544414864919, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.19103613806075143, 'subsample':
0.8841581495835548}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:10,618] Trial 301 finished with value: 0.008931790096656877
and parameters: {'learning_rate': 0.29060688711469307, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.19229671328400197, 'subsample':
0.8838258225506292}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:12,337] Trial 302 finished with value: 0.009257602248198542
and parameters: {'learning_rate': 0.2883555151364747, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.1944708726330835, 'subsample':
0.8839914482080773}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:12,736] Trial 303 finished with value: 0.009404714238087203
and parameters: {'learning_rate': 0.29203342493974677, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20851441160084982, 'subsample':
0.8842251580669228}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:13,158] Trial 304 finished with value: 0.008589492763831745
and parameters: {'learning_rate': 0.289871618953939, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.2155028528792774, 'subsample':
0.8840868008935041}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:13,547] Trial 305 finished with value: 0.008914829234948268
and parameters: {'learning_rate': 0.29111631004901545, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.19650082157180107, 'subsample':
0.8837164583176246}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:13,933] Trial 306 finished with value: 0.01002337586341529
and parameters: {'learning_rate': 0.2888058328648893, 'max_depth': 8,
'n_estimators': 423, 'reg_lambda': 0.19769464720354138, 'subsample':
0.884473543520262}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:14,438] Trial 307 finished with value: 0.009782205589869008
and parameters: {'learning_rate': 0.2876444124286534, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.20619530909099157, 'subsample':
0.8838943700748987}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:14,841] Trial 308 finished with value: 0.011357682239775969
and parameters: {'learning_rate': 0.2899771415710831, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.20910468333692578, 'subsample':
0.8843384253463599}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:15,268] Trial 309 finished with value: 0.009706923492945708
and parameters: {'learning_rate': 0.2938543211006571, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.19016226221572533, 'subsample':
0.8840272877477784}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:15,679] Trial 310 finished with value: 0.009765968844103802
and parameters: {'learning_rate': 0.29081980077116304, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.20556882673067753, 'subsample':
0.8849683201583556}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:16,130] Trial 311 finished with value: 0.008121756352484296
and parameters: {'learning_rate': 0.2890682551555662, 'max_depth': 8,
'n_estimators': 441, 'reg_lambda': 0.20747502565921655, 'subsample':
0.884139141118212}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:16,554] Trial 312 finished with value: 0.00842296339432446
and parameters: {'learning_rate': 0.28559142681623045, 'max_depth': 8,
'n_estimators': 436, 'reg_lambda': 0.20782138657560953, 'subsample':
0.883832319399688}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:16,944] Trial 313 finished with value: 0.009974302569075565
and parameters: {'learning_rate': 0.28873936472674533, 'max_depth': 8,
'n_estimators': 444, 'reg_lambda': 0.20697437411497435, 'subsample':
0.8841166205460765}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:17,388] Trial 314 finished with value: 0.009697554226863437
and parameters: {'learning_rate': 0.2867268111371316, 'max_depth': 8,
'n_estimators': 449, 'reg_lambda': 0.20810525483003828, 'subsample':
0.8839862410315404}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:17,789] Trial 315 finished with value: 0.010219345439102035
and parameters: {'learning_rate': 0.2879152427280457, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20661086070302603, 'subsample':
0.88512884135324}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:18,230] Trial 316 finished with value: 0.009088695706209637
and parameters: {'learning_rate': 0.2892019228151435, 'max_depth': 8,
'n_estimators': 488, 'reg_lambda': 0.20758179419083242, 'subsample':
0.8842265322037883}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:18,659] Trial 317 finished with value: 0.008961864515137726
and parameters: {'learning_rate': 0.2899034893816597, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20982829602868666, 'subsample':
0.8835473923545543}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:19,091] Trial 318 finished with value: 0.009274990909185283
and parameters: {'learning_rate': 0.28732748932806634, 'max_depth': 8,
'n_estimators': 486, 'reg_lambda': 0.20907202576357914, 'subsample':
0.8838705757779552}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:19,512] Trial 319 finished with value: 0.008818207439647195
and parameters: {'learning_rate': 0.2886548137185995, 'max_depth': 8,
'n_estimators': 443, 'reg_lambda': 0.20601770033129918, 'subsample':
0.8841249827455986}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:19,909] Trial 320 finished with value: 0.009207993513705923
and parameters: {'learning_rate': 0.28953751281432216, 'max_depth': 8,
'n_estimators': 442, 'reg_lambda': 0.2072450124383449, 'subsample':
0.883703516622884}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:20,358] Trial 321 finished with value: 0.00968326217089815
and parameters: {'learning_rate': 0.29084939410296584, 'max_depth': 8,
'n_estimators': 441, 'reg_lambda': 0.20855586701486614, 'subsample':
0.8839960919918822}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:20,783] Trial 322 finished with value: 0.009940291198297589
and parameters: {'learning_rate': 0.28823684176985437, 'max_depth': 8,
'n_estimators': 446, 'reg_lambda': 0.2079029319976091, 'subsample':
0.8841834526407917}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:21,218] Trial 323 finished with value: 0.009555242449050549
and parameters: {'learning_rate': 0.2916845872469486, 'max_depth': 8,
'n_estimators': 439, 'reg_lambda': 0.20526507141044076, 'subsample':
0.8837881615421433}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:21,642] Trial 324 finished with value: 0.008649915795605388
and parameters: {'learning_rate': 0.2899118789538131, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20686133243249755, 'subsample':
0.884640273545339}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:22,027] Trial 325 finished with value: 0.010717869909962994
and parameters: {'learning_rate': 0.3287600039607449, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.20631739441218297, 'subsample':
0.883965617767515}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:22,990] Trial 326 finished with value: 0.009005119753976993
and parameters: {'learning_rate': 0.28648160236502573, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.20825901248041104, 'subsample':
0.8841266028717554}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:25,042] Trial 327 finished with value: 0.009539837723543537
and parameters: {'learning_rate': 0.28473869157866544, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.21057565601590345, 'subsample':
0.8848294915245659}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:26,905] Trial 328 finished with value: 0.009051204327324251
and parameters: {'learning_rate': 0.2905118076916052, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.20419407923070645, 'subsample':
0.8842652345587726}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:27,382] Trial 329 finished with value: 0.01044519675714658
and parameters: {'learning_rate': 0.2891213652226419, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.2094718577312702, 'subsample':
0.8838689402622975}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:27,795] Trial 330 finished with value: 0.009964925222308406
and parameters: {'learning_rate': 0.2924663957537066, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.2073043005314404, 'subsample':
0.8840505154733436}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:28,192] Trial 331 finished with value: 0.010022456554938742
and parameters: {'learning_rate': 0.28801264808936916, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.205876062597751, 'subsample':
0.8845330237188354}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:28,608] Trial 332 finished with value: 0.010357347079432741
and parameters: {'learning_rate': 0.2910623925238602, 'max_depth': 8,
'n_estimators': 487, 'reg_lambda': 0.20856860204981303, 'subsample':
0.8843503442298782}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:29,023] Trial 333 finished with value: 0.008315305117387279
and parameters: {'learning_rate': 0.28935307416609457, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.2077168262716097, 'subsample':
0.8839595155789931}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:29,431] Trial 334 finished with value: 0.00985325614676248
and parameters: {'learning_rate': 0.2892055487369602, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20683536958893176, 'subsample':
0.8836192714486831}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:29,854] Trial 335 finished with value: 0.008902544606145108
and parameters: {'learning_rate': 0.2875084741398355, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.19254204472121603, 'subsample':
0.8837766596028989}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:30,251] Trial 336 finished with value: 0.008670825578397672
and parameters: {'learning_rate': 0.2886913022500316, 'max_depth': 8,
'n_estimators': 497, 'reg_lambda': 0.1938566587839302, 'subsample':
0.8839134613529089}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:30,677] Trial 337 finished with value: 0.008719479421259196
and parameters: {'learning_rate': 0.28992890328351995, 'max_depth': 8,
'n_estimators': 495, 'reg_lambda': 0.20499498018343323, 'subsample':
0.8840006535814156}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:31,084] Trial 338 finished with value: 0.009101701668221674
and parameters: {'learning_rate': 0.29140665112951264, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20777697992704752, 'subsample':
0.8839157536477419}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:31,482] Trial 339 finished with value: 0.009181690842197188
and parameters: {'learning_rate': 0.2894282889226328, 'max_depth': 8,
'n_estimators': 491, 'reg_lambda': 0.2287785462807501, 'subsample':
0.8837176672361402}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:31,913] Trial 340 finished with value: 0.009627689749408263
and parameters: {'learning_rate': 0.28607564682077075, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20660693553550072, 'subsample':
0.8840769721135193}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:32,332] Trial 341 finished with value: 0.009701235666700796
and parameters: {'learning_rate': 0.28736316138039203, 'max_depth': 7,
'n_estimators': 472, 'reg_lambda': 0.20895565215841122, 'subsample':
0.8839029773344153}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:32,748] Trial 342 finished with value: 0.009921976370405853
and parameters: {'learning_rate': 0.290499262180416, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2175131486010134, 'subsample':
0.8840946290067945}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:33,157] Trial 343 finished with value: 0.010354769940210392
and parameters: {'learning_rate': 0.28884930595524866, 'max_depth': 8,
'n_estimators': 490, 'reg_lambda': 0.20747959030961438, 'subsample':
0.8837781878959869}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:33,545] Trial 344 finished with value: 0.00882560630668695
and parameters: {'learning_rate': 0.29270259162905, 'max_depth': 8,
'n_estimators': 450, 'reg_lambda': 0.2062546334558602, 'subsample':
0.8839862198617732}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:34,023] Trial 345 finished with value: 0.00975156341590009
and parameters: {'learning_rate': 0.28817833394469317, 'max_depth': 8,
'n_estimators': 492, 'reg_lambda': 0.20984301270969702, 'subsample':
0.8841599868692305}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:34,467] Trial 346 finished with value: 0.009958676784359955
and parameters: {'learning_rate': 0.29009042670285223, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.2210407455597843, 'subsample':
0.8843873620395496}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:34,913] Trial 347 finished with value: 0.00975825131600222
and parameters: {'learning_rate': 0.29157822354846463, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.21362790864136474, 'subsample':
0.8838428506921736}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:35,333] Trial 348 finished with value: 0.009009589850544958
and parameters: {'learning_rate': 0.2892419822579451, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.207431001514271, 'subsample':
0.8842460953720733}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:35,735] Trial 349 finished with value: 0.009430507827699072
and parameters: {'learning_rate': 0.2909155077972466, 'max_depth': 8,
'n_estimators': 493, 'reg_lambda': 0.20564733127098608, 'subsample':
0.8840213572262373}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:36,173] Trial 350 finished with value: 0.010222214022076587
and parameters: {'learning_rate': 0.2882271647291745, 'max_depth': 8,
'n_estimators': 489, 'reg_lambda': 0.21128690296646238, 'subsample':
0.883494019535521}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:36,564] Trial 351 finished with value: 0.007829213014035476
and parameters: {'learning_rate': 0.29000658287134057, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.1954209060156179, 'subsample':
0.8841499012411393}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:36,987] Trial 352 finished with value: 0.010834912816031243
and parameters: {'learning_rate': 0.2920734375444032, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.20818194213930502, 'subsample':
0.8844645448098926}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:38,369] Trial 353 finished with value: 0.009848703096132894
and parameters: {'learning_rate': 0.28689085831223626, 'max_depth': 9,
'n_estimators': 436, 'reg_lambda': 0.20716437523677877, 'subsample':
0.8842738173663962}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:40,367] Trial 354 finished with value: 0.009046387529683881
and parameters: {'learning_rate': 0.2904789763742519, 'max_depth': 8,
'n_estimators': 451, 'reg_lambda': 0.20079364798558888, 'subsample':
0.8841530164114905}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:41,870] Trial 355 finished with value: 0.009989801693583792
and parameters: {'learning_rate': 0.28917961973134626, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.19167308984875814, 'subsample':
0.8847563364561862}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:42,282] Trial 356 finished with value: 0.009284503750563815
and parameters: {'learning_rate': 0.2932985923863239, 'max_depth': 8,
'n_estimators': 455, 'reg_lambda': 0.20243970321356902, 'subsample':
0.8840880640419687}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:42,658] Trial 357 finished with value: 0.009674926496454721
and parameters: {'learning_rate': 0.29126862130889286, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.2088663926900571, 'subsample':
0.8842277686316123}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:43,066] Trial 358 finished with value: 0.008534563108698183
and parameters: {'learning_rate': 0.287969828243502, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.2064916890201023, 'subsample':
0.8843884670616197}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:43,482] Trial 359 finished with value: 0.00871333252282937
and parameters: {'learning_rate': 0.2902789143429757, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.20534227811664657, 'subsample':
0.8836610971377883}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:43,872] Trial 360 finished with value: 0.010773745982278536
and parameters: {'learning_rate': 0.2889752125844591, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.22305675229641986, 'subsample':
0.8846212249780016}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:44,277] Trial 361 finished with value: 0.008756189975223828
and parameters: {'learning_rate': 0.2918875053645908, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.19972032091066685, 'subsample':
0.8840454684913744}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:44,656] Trial 362 finished with value: 0.011383177874894432
and parameters: {'learning_rate': 0.3030981485142712, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20802691866993017, 'subsample':
0.8810219772022283}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:45,057] Trial 363 finished with value: 0.008699807019872774
and parameters: {'learning_rate': 0.28988865332051517, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.2276429911843475, 'subsample':
0.8839148430250662}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:45,523] Trial 364 finished with value: 0.00928280854128895
and parameters: {'learning_rate': 0.2874877973746374, 'max_depth': 8,
'n_estimators': 494, 'reg_lambda': 0.19464708276422676, 'subsample':
0.8845326311637908}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:45,908] Trial 365 finished with value: 0.011319297187101684
and parameters: {'learning_rate': 0.2909384015492324, 'max_depth': 8,
'n_estimators': 448, 'reg_lambda': 0.20934286487576673, 'subsample':
0.8842075920900985}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:46,328] Trial 366 finished with value: 0.009098825301254753
and parameters: {'learning_rate': 0.28864102513185713, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20698269483330556, 'subsample':
0.8838289432103787}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:46,715] Trial 367 finished with value: 0.008934989884925639
and parameters: {'learning_rate': 0.289619323693203, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20438161699711174, 'subsample':
0.8841326855937374}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:47,112] Trial 368 finished with value: 0.010408002340364566
and parameters: {'learning_rate': 0.2905983347902984, 'max_depth': 8,
'n_estimators': 458, 'reg_lambda': 0.2082876913209388, 'subsample':
0.8843653694660949}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:47,536] Trial 369 finished with value: 0.00830482296552045
and parameters: {'learning_rate': 0.2925524919294042, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.21869456366197468, 'subsample':
0.8840310054424267}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:47,935] Trial 370 finished with value: 0.009745506980975163
and parameters: {'learning_rate': 0.2947041896642733, 'max_depth': 8,
'n_estimators': 482, 'reg_lambda': 0.2194273674358392, 'subsample':
0.8839817895884097}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:48,329] Trial 371 finished with value: 0.008506123008851852
and parameters: {'learning_rate': 0.2928509334408572, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.19584501847525437, 'subsample':
0.8837584568545293}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:48,747] Trial 372 finished with value: 0.009765627411394102
and parameters: {'learning_rate': 0.291943238678016, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.22150806147538235, 'subsample':
0.8840199519043962}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:49,137] Trial 373 finished with value: 0.010620061086859237
and parameters: {'learning_rate': 0.2913387053411195, 'max_depth': 8,
'n_estimators': 484, 'reg_lambda': 0.2165911573104986, 'subsample':
0.8838846705404911}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:49,563] Trial 374 finished with value: 0.009660863964985137
and parameters: {'learning_rate': 0.2936740348531615, 'max_depth': 8,
'n_estimators': 485, 'reg_lambda': 0.22501344885570101, 'subsample':
0.8836032127779508}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:49,974] Trial 375 finished with value: 0.010026317077281799
and parameters: {'learning_rate': 0.2884121912293179, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.21805327667740063, 'subsample':
0.8826516426463709}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:50,371] Trial 376 finished with value: 0.009000143671952726
and parameters: {'learning_rate': 0.290413488669373, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.2203150069563017, 'subsample':
0.8840990013345736}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:50,771] Trial 377 finished with value: 0.008613180729007876
and parameters: {'learning_rate': 0.28943377264663755, 'max_depth': 8,
'n_estimators': 499, 'reg_lambda': 0.21860395730621818, 'subsample':
0.8838327737629715}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:51,183] Trial 378 finished with value: 0.008515408081837263
and parameters: {'learning_rate': 0.29147530572278285, 'max_depth': 8,
'n_estimators': 497, 'reg_lambda': 0.20594160384080007, 'subsample':
0.8839550537931725}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:51,680] Trial 379 finished with value: 0.008987333731195393
and parameters: {'learning_rate': 0.29264372234290864, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.21017290134207994, 'subsample':
0.8840892827854603}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:53,718] Trial 380 finished with value: 0.00909658867258471
and parameters: {'learning_rate': 0.28715398669918074, 'max_depth': 8,
'n_estimators': 483, 'reg_lambda': 0.20746736076554764, 'subsample':
0.8849049761932822}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:56,230] Trial 381 finished with value: 0.009030930002048142
and parameters: {'learning_rate': 0.2904044547292642, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.20656078889048765, 'subsample':
0.88370032109609}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:56,662] Trial 382 finished with value: 0.008365778925553336
and parameters: {'learning_rate': 0.2887253175751165, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20875010908233066, 'subsample':
0.8841957838040504}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:57,161] Trial 383 finished with value: 0.007755504209686423
and parameters: {'learning_rate': 0.28969478581486946, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20775804491370872, 'subsample':
0.8839853022654105}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:57,611] Trial 384 finished with value: 0.008660588608269243
and parameters: {'learning_rate': 0.28640354630696613, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.19314913678524095, 'subsample':
0.8839489648380512}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:58,076] Trial 385 finished with value: 0.009215105014453355
and parameters: {'learning_rate': 0.2882970193473455, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.2053197460343476, 'subsample':
0.8837989364801481}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:51:58,499] Trial 386 finished with value: 0.007961609256050977
and parameters: {'learning_rate': 0.2893872160912539, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20617817667958324, 'subsample':
0.8840249475681191}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:58,949] Trial 387 finished with value: 0.007815378686648278
and parameters: {'learning_rate': 0.28920576816094823, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.2223377693291559, 'subsample':
0.8840003221690073}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:59,361] Trial 388 finished with value: 0.009001098546123914
and parameters: {'learning_rate': 0.28752286959929824, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.22377177805681941, 'subsample':
0.8840397034650139}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:51:59,757] Trial 389 finished with value: 0.008372867276726776
and parameters: {'learning_rate': 0.288239260638324, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20461882466818918, 'subsample':
0.883859290873169}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:00,164] Trial 390 finished with value: 0.009501685820287355
and parameters: {'learning_rate': 0.28910366179603725, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.22143450676623305, 'subsample':
0.8840288796562615}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:00,563] Trial 391 finished with value: 0.008995149411624655
and parameters: {'learning_rate': 0.2855714899817907, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.22237059391094027, 'subsample':
0.8837528150987344}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:00,973] Trial 392 finished with value: 0.010925776047108777
and parameters: {'learning_rate': 0.3076131339361711, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.2062509139503483, 'subsample':
0.8838961861724075}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:01,394] Trial 393 finished with value: 0.008479222824416401
and parameters: {'learning_rate': 0.2901073677800888, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20559534046013025, 'subsample':
0.8840950994411335}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:01,785] Trial 394 finished with value: 0.010398360459650462
and parameters: {'learning_rate': 0.2875262555222611, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.1953619038249957, 'subsample':
0.8839715769364771}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:02,204] Trial 395 finished with value: 0.009676520511185926
and parameters: {'learning_rate': 0.28930024954122974, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20706131535435918, 'subsample':
0.8842219785630451}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:02,605] Trial 396 finished with value: 0.009118726014408938
and parameters: {'learning_rate': 0.29106008629371993, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.22031455280891088, 'subsample':
0.8836876230347068}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:03,038] Trial 397 finished with value: 0.008501385761117166
and parameters: {'learning_rate': 0.2884411667682068, 'max_depth': 8,
'n_estimators': 470, 'reg_lambda': 0.20618792243628695, 'subsample':
0.8838023936310103}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:03,468] Trial 398 finished with value: 0.011886923950483927
and parameters: {'learning_rate': 0.2901287892863328, 'max_depth': 7,
'n_estimators': 476, 'reg_lambda': 0.2165489261311876, 'subsample':
0.8840633030666215}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:03,881] Trial 399 finished with value: 0.009568311418365604
and parameters: {'learning_rate': 0.2919878486473279, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.22224035332080064, 'subsample':
0.8839061811151161}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:04,272] Trial 400 finished with value: 0.00910457172466179
and parameters: {'learning_rate': 0.30546707934324047, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.22465028054120464, 'subsample':
0.8842579299770293}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:04,662] Trial 401 finished with value: 0.008555943399027993
and parameters: {'learning_rate': 0.2895164329723403, 'max_depth': 8,
'n_estimators': 474, 'reg_lambda': 0.20336494839809224, 'subsample':
0.8835689724717721}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:05,087] Trial 402 finished with value: 0.009410009895130828
and parameters: {'learning_rate': 0.2867132951032058, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.20674160496177565, 'subsample':
0.8841395762503311}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:05,484] Trial 403 finished with value: 0.010619928892932843
and parameters: {'learning_rate': 0.2961038828574667, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.2050499920220386, 'subsample':
0.882374501324389}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:05,881] Trial 404 finished with value: 0.009616905487846942
and parameters: {'learning_rate': 0.2908785639560407, 'max_depth': 8,
'n_estimators': 471, 'reg_lambda': 0.1942248184587797, 'subsample':
0.8834208882707406}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:06,496] Trial 405 finished with value: 0.00954789028158333
and parameters: {'learning_rate': 0.28866934376774317, 'max_depth': 8,
'n_estimators': 475, 'reg_lambda': 0.22321404940914163, 'subsample':
0.8839943410481514}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:07,792] Trial 406 finished with value: 0.009926598344979503
and parameters: {'learning_rate': 0.2877662598510304, 'max_depth': 8,
'n_estimators': 456, 'reg_lambda': 0.21974148148127187, 'subsample':
0.8838600462566729}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:09,314] Trial 407 finished with value: 0.010463397310539252
and parameters: {'learning_rate': 0.31989193191054194, 'max_depth': 8,
'n_estimators': 473, 'reg_lambda': 0.20723000093216218, 'subsample':
0.8840856889261309}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:11,347] Trial 408 finished with value: 0.009604433526240354
and parameters: {'learning_rate': 0.29020210554043346, 'max_depth': 8,
'n_estimators': 440, 'reg_lambda': 0.2078550421236033, 'subsample':
0.8842708187529529}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:11,736] Trial 409 finished with value: 0.009763128591895508
and parameters: {'learning_rate': 0.29208183534589777, 'max_depth': 8,
'n_estimators': 480, 'reg_lambda': 0.20578479766717483, 'subsample':
0.8839582610513265}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:12,146] Trial 410 finished with value: 0.009359580561491354
and parameters: {'learning_rate': 0.28940053504949614, 'max_depth': 8,
'n_estimators': 477, 'reg_lambda': 0.21863686865780754, 'subsample':
0.8841550259550818}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:12,566] Trial 411 finished with value: 0.008489117751112486
and parameters: {'learning_rate': 0.29100135798552845, 'max_depth': 8,
'n_estimators': 453, 'reg_lambda': 0.20639845155473238, 'subsample':
0.8837761776497239}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:12,931] Trial 412 finished with value: 0.01035586840479125
and parameters: {'learning_rate': 0.28855090632214925, 'max_depth': 10,
'n_estimators': 433, 'reg_lambda': 0.20736912540825875, 'subsample':
0.8840176816489161}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:13,329] Trial 413 finished with value: 0.008576484373924774
and parameters: {'learning_rate': 0.29011196973297837, 'max_depth': 8,
'n_estimators': 479, 'reg_lambda': 0.21542869082555535, 'subsample':
0.8838925092030206}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:13,727] Trial 414 finished with value: 0.01042002904653212
and parameters: {'learning_rate': 0.2932327264169194, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20912173285438576, 'subsample':
0.8836491200918496}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:14,115] Trial 415 finished with value: 0.009838146351071438
and parameters: {'learning_rate': 0.2914954470704261, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.19607041263843, 'subsample':
0.8841558841705545}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:14,533] Trial 416 finished with value: 0.0087785633372192
and parameters: {'learning_rate': 0.28910696142699716, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.21256726625392622, 'subsample':
0.8840270319364715}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:14,909] Trial 417 finished with value: 0.010221063053806025
and parameters: {'learning_rate': 0.2874521850254143, 'max_depth': 9,
'n_estimators': 474, 'reg_lambda': 0.20799737827255493, 'subsample':
0.8838443565744889}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:15,306] Trial 418 finished with value: 0.009410462396933264
and parameters: {'learning_rate': 0.2904507142240996, 'max_depth': 8,
'n_estimators': 476, 'reg_lambda': 0.20699364973510778, 'subsample':
0.8842824988849588}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:15,722] Trial 419 finished with value: 0.009334041329786897
and parameters: {'learning_rate': 0.2863347842463355, 'max_depth': 8,
'n_estimators': 472, 'reg_lambda': 0.22567367304593852, 'subsample':
0.8841659865646476}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:16,118] Trial 420 finished with value: 0.008355889285202972
and parameters: {'learning_rate': 0.2894404697925847, 'max_depth': 8,
'n_estimators': 437, 'reg_lambda': 0.20392159687223774, 'subsample':
0.8839708800039756}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:16,552] Trial 421 finished with value: 0.00947505589328691
and parameters: {'learning_rate': 0.28808488624446477, 'max_depth': 8,
'n_estimators': 478, 'reg_lambda': 0.2055437513142467, 'subsample':
0.8837656517030812}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:16,924] Trial 422 finished with value: 0.009129236776008251
and parameters: {'learning_rate': 0.2925042336634557, 'max_depth': 8,
'n_estimators': 446, 'reg_lambda': 0.20878544501454727, 'subsample':
0.8840639010206208}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:17,311] Trial 423 finished with value: 0.009500966612422083
and parameters: {'learning_rate': 0.2910612077944512, 'max_depth': 8,
'n_estimators': 460, 'reg_lambda': 0.19483443194459163, 'subsample':
0.8843058573888863}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:17,718] Trial 424 finished with value: 0.007375364610628663
and parameters: {'learning_rate': 0.28977033887003906, 'max_depth': 8,
'n_estimators': 423, 'reg_lambda': 0.20652918887056376, 'subsample':
0.8838694731479175}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:18,091] Trial 425 finished with value: 0.01094592346617708
and parameters: {'learning_rate': 0.2887880042272086, 'max_depth': 8,
'n_estimators': 434, 'reg_lambda': 0.2061215316360498, 'subsample':
0.8835216464962887}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:18,496] Trial 426 finished with value: 0.009915401870878419
and parameters: {'learning_rate': 0.2871533565908558, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20450689558945778, 'subsample':
0.8836688209374649}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:18,898] Trial 427 finished with value: 0.008113496906049516
and parameters: {'learning_rate': 0.28999645845680305, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.20662858310245333, 'subsample':
0.8838669169848492}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:19,289] Trial 428 finished with value: 0.008814837099218186
and parameters: {'learning_rate': 0.2847400970313726, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20662265302187832, 'subsample':
0.883660853305306}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:19,698] Trial 429 finished with value: 0.009697519934336696
and parameters: {'learning_rate': 0.28823057712399014, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.20568985565604306, 'subsample':
0.8838199693940494}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:20,091] Trial 430 finished with value: 0.008969098901438743
and parameters: {'learning_rate': 0.2900066492743434, 'max_depth': 8,
'n_estimators': 422, 'reg_lambda': 0.20492918712113728, 'subsample':
0.8838707717893155}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:20,481] Trial 431 finished with value: 0.009681951524958573
and parameters: {'learning_rate': 0.28929557762114455, 'max_depth': 8,
'n_estimators': 420, 'reg_lambda': 0.20761406454936387, 'subsample':
0.8837417617191788}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:20,914] Trial 432 finished with value: 0.010254333559533372
and parameters: {'learning_rate': 0.28792000751737873, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.2068191576592102, 'subsample':
0.8828247809967521}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:21,740] Trial 433 finished with value: 0.010734667386716315
and parameters: {'learning_rate': 0.2859562801310869, 'max_depth': 8,
'n_estimators': 469, 'reg_lambda': 0.20823691335095623, 'subsample':
0.8839033618450047}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:23,854] Trial 434 finished with value: 0.009738153788065786
and parameters: {'learning_rate': 0.2906054768824857, 'max_depth': 8,
'n_estimators': 432, 'reg_lambda': 0.20645672289171255, 'subsample':
0.8802869559808076}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:25,908] Trial 435 finished with value: 0.008136839886738361
and parameters: {'learning_rate': 0.28944678106858357, 'max_depth': 8,
'n_estimators': 431, 'reg_lambda': 0.2075974232651483, 'subsample':
0.8839279005648861}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:26,298] Trial 436 finished with value: 0.009571191730770513
and parameters: {'learning_rate': 0.288833633262561, 'max_depth': 8,
'n_estimators': 422, 'reg_lambda': 0.2057965279512604, 'subsample':
0.8837494735047545}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:26,696] Trial 437 finished with value: 0.009282451063050279
and parameters: {'learning_rate': 0.28961796737237644, 'max_depth': 8,
'n_estimators': 436, 'reg_lambda': 0.2071961691540318, 'subsample':
0.8835670645932417}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:27,109] Trial 438 finished with value: 0.010060385023933794
and parameters: {'learning_rate': 0.28700451699436996, 'max_depth': 8,
'n_estimators': 434, 'reg_lambda': 0.20506552957000646, 'subsample':
0.8838964141450091}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:27,537] Trial 439 finished with value: 0.009484729812767831
and parameters: {'learning_rate': 0.288158403819312, 'max_depth': 8,
'n_estimators': 429, 'reg_lambda': 0.20743892205527598, 'subsample':
0.883810527460166}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:27,914] Trial 440 finished with value: 0.008346725742336017
and parameters: {'learning_rate': 0.2895911979791525, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.20672003306508271, 'subsample':
0.8833338873882131}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:28,325] Trial 441 finished with value: 0.01036966588536352
and parameters: {'learning_rate': 0.29106573475218844, 'max_depth': 8,
'n_estimators': 429, 'reg_lambda': 0.20841710548952358, 'subsample':
0.8817377001988219}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:28,700] Trial 442 finished with value: 0.008563840313592449
and parameters: {'learning_rate': 0.2887287138551711, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.20977062095839413, 'subsample':
0.883958529362618}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:29,107] Trial 443 finished with value: 0.008781401806782158
and parameters: {'learning_rate': 0.2874118676758327, 'max_depth': 8,
'n_estimators': 421, 'reg_lambda': 0.20626415022937042, 'subsample':
0.8853289269388511}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:29,500] Trial 444 finished with value: 0.008529169147951503
and parameters: {'learning_rate': 0.2900722744058704, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.20759712414944625, 'subsample':
0.8841414804723902}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:29,875] Trial 445 finished with value: 0.008878127945819896
and parameters: {'learning_rate': 0.29151419748799456, 'max_depth': 8,
'n_estimators': 431, 'reg_lambda': 0.20580904844443165, 'subsample':
0.8839337671755516}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:30,295] Trial 446 finished with value: 0.010550688972595012
and parameters: {'learning_rate': 0.28906417786509125, 'max_depth': 8,
'n_estimators': 438, 'reg_lambda': 0.20877303357388693, 'subsample':
0.8836681306584068}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:30,685] Trial 447 finished with value: 0.011153151527650234
and parameters: {'learning_rate': 0.2880813246325095, 'max_depth': 8,
'n_estimators': 435, 'reg_lambda': 0.21083419534825046, 'subsample':
0.8841169363075712}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:31,103] Trial 448 finished with value: 0.008849939335974189
and parameters: {'learning_rate': 0.29035896914296166, 'max_depth': 8,
'n_estimators': 432, 'reg_lambda': 0.2043124969751416, 'subsample':
0.8837748976536399}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:31,505] Trial 449 finished with value: 0.009446532830277136
and parameters: {'learning_rate': 0.28659808681364485, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.20694196852024374, 'subsample':
0.8839567718881136}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:31,912] Trial 450 finished with value: 0.009841676023349122
and parameters: {'learning_rate': 0.2892265568372539, 'max_depth': 8,
'n_estimators': 442, 'reg_lambda': 0.2078302154970789, 'subsample':
0.8842369826540692}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:32,333] Trial 451 finished with value: 0.008706689751259265
and parameters: {'learning_rate': 0.2917305719081964, 'max_depth': 8,
'n_estimators': 465, 'reg_lambda': 0.20544320123466783, 'subsample':
0.8838560028815937}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:32,887] Trial 452 finished with value: 0.008197361145461827
and parameters: {'learning_rate': 0.29802096239250725, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20626273819726526, 'subsample':
0.8840631356201422}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:34,453] Trial 453 finished with value: 0.008899904507830417
and parameters: {'learning_rate': 0.2901283981005492, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20618521820329339, 'subsample':
0.8843012868827863}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:35,883] Trial 454 finished with value: 0.009321444562152212
and parameters: {'learning_rate': 0.30164279520783405, 'max_depth': 8,
'n_estimators': 420, 'reg_lambda': 0.20698673992297006, 'subsample':
0.8840832438018866}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:37,317] Trial 455 finished with value: 0.010003426565582786
and parameters: {'learning_rate': 0.28830774398898634, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.2046778778290013, 'subsample':
0.8842322880160358}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:38,920] Trial 456 finished with value: 0.008639021299250453
and parameters: {'learning_rate': 0.30021090204858286, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20607530960651285, 'subsample':
0.8843958210859066}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:40,066] Trial 457 finished with value: 0.00998991012022877
and parameters: {'learning_rate': 0.29102763803222265, 'max_depth': 8,
'n_estimators': 423, 'reg_lambda': 0.2080047206242243, 'subsample':
0.8840413788914735}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:41,750] Trial 458 finished with value: 0.007630924988223071
and parameters: {'learning_rate': 0.2895740903830073, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20706235819841845, 'subsample':
0.8840964952183539}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:42,130] Trial 459 finished with value: 0.008574663888430189
and parameters: {'learning_rate': 0.2875716334595607, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.20515558629972394, 'subsample':
0.8841701527988071}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:42,514] Trial 460 finished with value: 0.009622714740945046
and parameters: {'learning_rate': 0.28915982260790823, 'max_depth': 8,
'n_estimators': 423, 'reg_lambda': 0.20658829274801258, 'subsample':
0.8843405805036477}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:42,921] Trial 461 finished with value: 0.008611662134618002
and parameters: {'learning_rate': 0.28566944355346674, 'max_depth': 8,
'n_estimators': 423, 'reg_lambda': 0.20715029598028611, 'subsample':
0.8841541839528271}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:43,312] Trial 462 finished with value: 0.009974224378909113
and parameters: {'learning_rate': 0.289641241605406, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20559759624241708, 'subsample':
0.8847027857229809}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:43,696] Trial 463 finished with value: 0.008296854217646154
and parameters: {'learning_rate': 0.2885219124066326, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20388399075385139, 'subsample':
0.8840110429997496}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:44,076] Trial 464 finished with value: 0.00917887106752485
and parameters: {'learning_rate': 0.30951189030285664, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.22677084859185084, 'subsample':
0.8841909735739678}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:44,471] Trial 465 finished with value: 0.010508722145560548
and parameters: {'learning_rate': 0.2908000896438197, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20614776925376826, 'subsample':
0.8844446664470589}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:44,890] Trial 466 finished with value: 0.008598048671051389
and parameters: {'learning_rate': 0.2974454088060279, 'max_depth': 8,
'n_estimators': 429, 'reg_lambda': 0.20151236974092876, 'subsample':
0.884059782574528}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:45,290] Trial 467 finished with value: 0.008751862800708988
and parameters: {'learning_rate': 0.28714726337320795, 'max_depth': 8,
'n_estimators': 448, 'reg_lambda': 0.2295871366673282, 'subsample':
0.8850718028453435}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:45,681] Trial 468 finished with value: 0.007769353216714321
and parameters: {'learning_rate': 0.28974061129530443, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.20929378435119297, 'subsample':
0.8839118228416802}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:46,092] Trial 469 finished with value: 0.009995512146100161
and parameters: {'learning_rate': 0.2921217115588674, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.20965266857634748, 'subsample':
0.8839009593336993}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:46,514] Trial 470 finished with value: 0.012376725708458613
and parameters: {'learning_rate': 0.29023171335744696, 'max_depth': 7,
'n_estimators': 425, 'reg_lambda': 0.2091641023741318, 'subsample':
0.8839374497234684}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:46,919] Trial 471 finished with value: 0.009948802404297581
and parameters: {'learning_rate': 0.2912555513341808, 'max_depth': 9,
'n_estimators': 423, 'reg_lambda': 0.2086128032781207, 'subsample':
0.8837670579131349}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:47,310] Trial 472 finished with value: 0.008300321124812412
and parameters: {'learning_rate': 0.2895557750005376, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20829278423073525, 'subsample':
0.8840621528725724}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:47,690] Trial 473 finished with value: 0.009086805750450245
and parameters: {'learning_rate': 0.2940095564782909, 'max_depth': 8,
'n_estimators': 421, 'reg_lambda': 0.20984598163753979, 'subsample':
0.8838881176329201}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:48,095] Trial 474 finished with value: 0.009376523261014924
and parameters: {'learning_rate': 0.2907954958763389, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.21168889498697216, 'subsample':
0.8842199585984251}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:48,486] Trial 475 finished with value: 0.008420862155307456
and parameters: {'learning_rate': 0.2896514235125305, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.2075049627394907, 'subsample':
0.8840230475985881}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:48,894] Trial 476 finished with value: 0.009786044669033845
and parameters: {'learning_rate': 0.2889894742343709, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.21372388467279035, 'subsample':
0.8838286642381222}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:49,302] Trial 477 finished with value: 0.010101877157807828
and parameters: {'learning_rate': 0.3044448438625356, 'max_depth': 8,
'n_estimators': 422, 'reg_lambda': 0.20927412946903565, 'subsample':
0.8841387484620415}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:49,691] Trial 478 finished with value: 0.009269985923412587
and parameters: {'learning_rate': 0.2903184202657453, 'max_depth': 8,
'n_estimators': 431, 'reg_lambda': 0.20695079120196053, 'subsample':
0.8835932873297531}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:50,123] Trial 479 finished with value: 0.009169331971475408
and parameters: {'learning_rate': 0.2923489941754673, 'max_depth': 8,
'n_estimators': 425, 'reg_lambda': 0.20765541910486518, 'subsample':
0.8839883325846425}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:50,505] Trial 480 finished with value: 0.009327359021887865
and parameters: {'learning_rate': 0.29863579440855736, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.21034615459269804, 'subsample':
0.8843205537636979}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:50,916] Trial 481 finished with value: 0.009340796741773 72
and parameters: {'learning_rate': 0.28854867907522874, 'max_depth': 8,
'n_estimators': 452, 'reg_lambda': 0.2085649548694659, 'subsample':
0.8837173959324927}. Best is trial 231 with value: 0.007239166067627477.

[I 2024-08-30 19:52:51,319] Trial 482 finished with value: 0.009438009904509473
and parameters: {'learning_rate': 0.29152247530341696, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.20664309714982065, 'subsample':
0.8838961336691902}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:52,098] Trial 483 finished with value: 0.011272714193831102
and parameters: {'learning_rate': 0.3126629986328316, 'max_depth': 8,
'n_estimators': 422, 'reg_lambda': 0.2052875546479301, 'subsample':
0.8840803787843052}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:53,441] Trial 484 finished with value: 0.00929331581795023
and parameters: {'learning_rate': 0.2898798261788328, 'max_depth': 8,
'n_estimators': 457, 'reg_lambda': 0.20788431837572316, 'subsample':
0.8842012143282337}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:54,976] Trial 485 finished with value: 0.00951602574773427
and parameters: {'learning_rate': 0.28789879546753816, 'max_depth': 8,
'n_estimators': 427, 'reg_lambda': 0.20616608929343552, 'subsample':
0.8839820109770352}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:56,654] Trial 486 finished with value: 0.008167757738026225
and parameters: {'learning_rate': 0.2892224865213019, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.20715192512458072, 'subsample':
0.8838186446096845}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:57,066] Trial 487 finished with value: 0.010218421430322984
and parameters: {'learning_rate': 0.2889566390293566, 'max_depth': 8,
'n_estimators': 432, 'reg_lambda': 0.20904889384686326, 'subsample':
0.8837439368793214}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:57,543] Trial 488 finished with value: 0.009713737073680773
and parameters: {'learning_rate': 0.28758153643910994, 'max_depth': 8,
'n_estimators': 429, 'reg_lambda': 0.2073850802657277, 'subsample':
0.8841407790399187}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:57,925] Trial 489 finished with value: 0.009159850116795465
and parameters: {'learning_rate': 0.28914083071723734, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.20816677580626272, 'subsample':
0.8839466841487201}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:58,327] Trial 490 finished with value: 0.00908869150317594
and parameters: {'learning_rate': 0.2885160685999387, 'max_depth': 8,
'n_estimators': 431, 'reg_lambda': 0.20695525867862843, 'subsample':
0.8842630375018109}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:58,723] Trial 491 finished with value: 0.01009224942073651
and parameters: {'learning_rate': 0.2865673023312875, 'max_depth': 8,
'n_estimators': 424, 'reg_lambda': 0.20840347474447088, 'subsample':
0.884068384077683}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:59,115] Trial 492 finished with value: 0.008873420389991091
and parameters: {'learning_rate': 0.2899584939785482, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.2074760408783616, 'subsample':
0.8838414237595543}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:52:59,540] Trial 493 finished with value: 0.00909801830851932
and parameters: {'learning_rate': 0.2906732541814406, 'max_depth': 8,
'n_estimators': 428, 'reg_lambda': 0.2057441932001481, 'subsample':
0.8834686639802968}. Best is trial 231 with value: 0.007239166067627477.

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[I 2024-08-30 19:52:59,934] Trial 494 finished with value: 0.010341742959205319
and parameters: {'learning_rate': 0.2877989975274746, 'max_depth': 8,
'n_estimators': 450, 'reg_lambda': 0.21089303143134952, 'subsample':
0.8843233035655405}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:53:00,331] Trial 495 finished with value: 0.009689848363267289
and parameters: {'learning_rate': 0.28909707152283337, 'max_depth': 8,
'n_estimators': 421, 'reg_lambda': 0.20932478839140845, 'subsample':
0.8839810848750719}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:53:00,731] Trial 496 finished with value: 0.008368745359003693
and parameters: {'learning_rate': 0.28975758686567554, 'max_depth': 8,
'n_estimators': 426, 'reg_lambda': 0.20668958150311056, 'subsample':
0.8831625073359668}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:53:01,116] Trial 497 finished with value: 0.009527875240107972
and parameters: {'learning_rate': 0.2839324473810747, 'max_depth': 8,
'n_estimators': 430, 'reg_lambda': 0.20474263659602368, 'subsample':
0.8841212679169141}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:53:01,537] Trial 498 finished with value: 0.009027062023381749
and parameters: {'learning_rate': 0.29168398999521894, 'max_depth': 8,
'n_estimators': 459, 'reg_lambda': 0.20276781392526672, 'subsample':
0.8836777759793327}. Best is trial 231 with value: 0.007239166067627477.
[I 2024-08-30 19:53:01,933] Trial 499 finished with value: 0.009007185859923739
and parameters: {'learning_rate': 0.28840073924235604, 'max_depth': 8,
'n_estimators': 433, 'reg_lambda': 0.20810526851007752, 'subsample':
0.8838335343024134}. Best is trial 231 with value: 0.007239166067627477.

            i=3: {'learning_rate': 0.28932687186567757, 'max_depth': 8,
'n_estimators': 481, 'reg_lambda': 0.20784360095091955, 'subsample':
0.8841831521812279}
    MSE    i=3: 0.007239166067627477
[9284. 9035. 9152.] [8276.32067871 8189.76898193 9085.62722015] [0.11 0.09 0.01]
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[I 2024-08-30 19:53:02,436] A new study created in memory with name: no-
name-0948e1e3-d7bf-4849-be45-c9592d60185d
[I 2024-08-30 19:53:02,865] Trial 0 finished with value: 0.01139430663423271 and
parameters: {'learning_rate': 0.2644459800424476, 'max_depth': 9,
'n_estimators': 502, 'reg_lambda': 0.21498060772757335, 'subsample':
0.8845056342548825}. Best is trial 0 with value: 0.01139430663423271.
[I 2024-08-30 19:53:03,219] Trial 1 finished with value: 0.010504125726670666
and parameters: {'learning_rate': 0.26942668759882304, 'max_depth': 11,
'n_estimators': 486, 'reg_lambda': 0.2630937198627594, 'subsample':
0.8838915146743163}. Best is trial 1 with value: 0.010504125726670666.
[I 2024-08-30 19:53:03,593] Trial 2 finished with value: 0.009907659496565642
and parameters: {'learning_rate': 0.28597474600644546, 'max_depth': 11,
'n_estimators': 483, 'reg_lambda': 0.2023234917339133, 'subsample':
0.8828122323467287}. Best is trial 2 with value: 0.009907659496565642.
[I 2024-08-30 19:53:03,943] Trial 3 finished with value: 0.009420683814160696
and parameters: {'learning_rate': 0.2906443158063634, 'max_depth': 9,
'n_estimators': 515, 'reg_lambda': 0.22995170298693177, 'subsample':
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0.8849585021621132}. Best is trial 3 with value: 0.009420683814160696.
[I 2024-08-30 19:53:04,284] Trial 4 finished with value: 0.009483154494554731
and parameters: {'learning_rate': 0.29973310419203925, 'max_depth': 11,
'n_estimators': 527, 'reg_lambda': 0.26944073783782696, 'subsample':
0.8817621724417825}. Best is trial 3 with value: 0.009420683814160696.
[I 2024-08-30 19:53:04,636] Trial 5 finished with value: 0.00923378135288832 and
parameters: {'learning_rate': 0.28424684851861975, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.2642868827386816, 'subsample':
0.8850905548019846}. Best is trial 5 with value: 0.00923378135288832.
[I 2024-08-30 19:53:05,013] Trial 6 finished with value: 0.009228658803563291
and parameters: {'learning_rate': 0.25037051229061663, 'max_depth': 9,
'n_estimators': 535, 'reg_lambda': 0.2385143238601486, 'subsample':
0.8853731374529169}. Best is trial 6 with value: 0.009228658803563291.
[I 2024-08-30 19:53:05,401] Trial 7 finished with value: 0.010599260837935437
and parameters: {'learning_rate': 0.25762097856789806, 'max_depth': 9,
'n_estimators': 541, 'reg_lambda': 0.2591218969181762, 'subsample':
0.8827567131646923}. Best is trial 6 with value: 0.009228658803563291.
[I 2024-08-30 19:53:05,780] Trial 8 finished with value: 0.008992790984417421
and parameters: {'learning_rate': 0.2613772988745451, 'max_depth': 10,
'n_estimators': 544, 'reg_lambda': 0.25442039752004675, 'subsample':
0.8820438369207306}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:06,140] Trial 9 finished with value: 0.009234712530869067
and parameters: {'learning_rate': 0.2501884945787566, 'max_depth': 10,
'n_estimators': 547, 'reg_lambda': 0.20209792551237626, 'subsample':
0.8825230573612391}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:06,815] Trial 10 finished with value: 0.009286116182729252
and parameters: {'learning_rate': 0.27594404959135466, 'max_depth': 10,
'n_estimators': 570, 'reg_lambda': 0.2786362611259301, 'subsample':
0.8802818728598398}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:09,176] Trial 11 finished with value: 0.010760615731123073
and parameters: {'learning_rate': 0.25048420987113296, 'max_depth': 9,
'n_estimators': 552, 'reg_lambda': 0.24309044577009278, 'subsample':
0.8811881214321009}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:11,173] Trial 12 finished with value: 0.010009342178422129
and parameters: {'learning_rate': 0.261185158346397, 'max_depth': 10,
'n_estimators': 528, 'reg_lambda': 0.2439478921867218, 'subsample':
0.8858736662569936}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:11,575] Trial 13 finished with value: 0.009264313536572808
and parameters: {'learning_rate': 0.2575021689933256, 'max_depth': 9,
'n_estimators': 562, 'reg_lambda': 0.231197246183798, 'subsample':
0.8835586560091392}. Best is trial 8 with value: 0.008992790984417421.
[I 2024-08-30 19:53:11,968] Trial 14 finished with value: 0.008941861039816873
and parameters: {'learning_rate': 0.26809571161751883, 'max_depth': 10,
'n_estimators': 535, 'reg_lambda': 0.25000644857968896, 'subsample':
0.8816930689074749}. Best is trial 14 with value: 0.008941861039816873.
[I 2024-08-30 19:53:12,352] Trial 15 finished with value: 0.008664733352196103
and parameters: {'learning_rate': 0.273067677090894, 'max_depth': 10,
'n_estimators': 519, 'reg_lambda': 0.2519947121161574, 'subsample':

0.881667327147761}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:12,738] Trial 16 finished with value: 0.010360113836394153
and parameters: {'learning_rate': 0.2743688849851421, 'max_depth': 10,
'n_estimators': 518, 'reg_lambda': 0.2462815977037062, 'subsample':
0.8808072782412241}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:13,114] Trial 17 finished with value: 0.010137220542148445
and parameters: {'learning_rate': 0.2754451748861757, 'max_depth': 11,
'n_estimators': 510, 'reg_lambda': 0.2503818237864649, 'subsample':
0.8813645438503235}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:13,503] Trial 18 finished with value: 0.009284308425828391
and parameters: {'learning_rate': 0.26864059555462705, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.23037960015415046, 'subsample':
0.8802805172774067}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:13,861] Trial 19 finished with value: 0.010742364167553262
and parameters: {'learning_rate': 0.2823024790529092, 'max_depth': 11,
'n_estimators': 534, 'reg_lambda': 0.2195465577504575, 'subsample':
0.8820519489137432}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:14,267] Trial 20 finished with value: 0.008774888704239195
and parameters: {'learning_rate': 0.2712573779067753, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.27190141251870686, 'subsample':
0.883409650998895}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:14,660] Trial 21 finished with value: 0.008770580527675315
and parameters: {'learning_rate': 0.27034506982629186, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.27329824651289963, 'subsample':
0.8832979618321681}. Best is trial 15 with value: 0.008664733352196103.
[I 2024-08-30 19:53:15,048] Trial 22 finished with value: 0.0077302712276656315
and parameters: {'learning_rate': 0.27264281765141474, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.27931639955873067, 'subsample':
0.8834691647765275}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:15,432] Trial 23 finished with value: 0.0093148486378799 and
parameters: {'learning_rate': 0.2793711051700725, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.27842531451405383, 'subsample':
0.8840437345563096}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:15,799] Trial 24 finished with value: 0.008999927953400697
and parameters: {'learning_rate': 0.2778292262031235, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.2712296772233273, 'subsample':
0.8832207094114521}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:16,192] Trial 25 finished with value: 0.008994583651449539
and parameters: {'learning_rate': 0.2725566146977497, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.258085173499462, 'subsample':
0.8824043898293136}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:16,586] Trial 26 finished with value: 0.01043394826463893
and parameters: {'learning_rate': 0.2644739958216433, 'max_depth': 11,
'n_estimators': 522, 'reg_lambda': 0.2783772589170491, 'subsample':
0.8842407401881914}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:16,944] Trial 27 finished with value: 0.00996577369002728
and parameters: {'learning_rate': 0.2903491992134739, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.26629723765449675, 'subsample':

0.88303020935232}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:17,356] Trial 28 finished with value: 0.009054833950999194
and parameters: {'learning_rate': 0.2795443623257645, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.27399328256751504, 'subsample':
0.884586870867862}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:17,721] Trial 29 finished with value: 0.010522428691152478
and parameters: {'learning_rate': 0.2659639923491619, 'max_depth': 9,
'n_estimators': 480, 'reg_lambda': 0.25896105653396334, 'subsample':
0.8809504690379951}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:18,107] Trial 30 finished with value: 0.009298944918917581
and parameters: {'learning_rate': 0.2612087611557472, 'max_depth': 10,
'n_estimators': 514, 'reg_lambda': 0.2664144415272208, 'subsample':
0.8837543237652649}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:18,521] Trial 31 finished with value: 0.00916265229914491
and parameters: {'learning_rate': 0.27199449224327327, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.2736713999115859, 'subsample':
0.8832336447534339}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:18,912] Trial 32 finished with value: 0.009481689382450054
and parameters: {'learning_rate': 0.27098452856870864, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.2735662685456632, 'subsample':
0.883492903925765}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:19,311] Trial 33 finished with value: 0.007979233645803043
and parameters: {'learning_rate': 0.26693067596811354, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2614988146117035, 'subsample':
0.884397739201116}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:19,688] Trial 34 finished with value: 0.009813464457121616
and parameters: {'learning_rate': 0.26669964789830297, 'max_depth': 11,
'n_estimators': 487, 'reg_lambda': 0.26154539305377195, 'subsample':
0.8844844044302259}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:20,073] Trial 35 finished with value: 0.008933770168739983
and parameters: {'learning_rate': 0.2690742679578336, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.2548739946517948, 'subsample':
0.8839199203061754}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:20,493] Trial 36 finished with value: 0.008802585177157237
and parameters: {'learning_rate': 0.2637375055445061, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2679985718737645, 'subsample':
0.8844379431370637}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:20,867] Trial 37 finished with value: 0.009250206487108404
and parameters: {'learning_rate': 0.28753554009221594, 'max_depth': 11,
'n_estimators': 517, 'reg_lambda': 0.23734212564682955, 'subsample':
0.8848174152574267}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:21,981] Trial 38 finished with value: 0.00876526340612893
and parameters: {'learning_rate': 0.2988260645131119, 'max_depth': 9,
'n_estimators': 498, 'reg_lambda': 0.26249923329616903, 'subsample':
0.8828424797389817}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:23,767] Trial 39 finished with value: 0.010722965966073434
and parameters: {'learning_rate': 0.298145919288395, 'max_depth': 9,
'n_estimators': 496, 'reg_lambda': 0.25412413849079424, 'subsample':

0.8825275963853184}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:24,716] Trial 40 finished with value: 0.00885102156782917
and parameters: {'learning_rate': 0.2953378204809292, 'max_depth': 9,
'n_estimators': 490, 'reg_lambda': 0.20961893413019878, 'subsample':
0.8852815738764547}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:25,645] Trial 41 finished with value: 0.010301637864401603
and parameters: {'learning_rate': 0.2813596323483815, 'max_depth': 9,
'n_estimators': 501, 'reg_lambda': 0.26348066994593067, 'subsample':
0.8828596601897495}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:26,013] Trial 42 finished with value: 0.00820363733505238
and parameters: {'learning_rate': 0.27315556639135286, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2620422319239502, 'subsample':
0.8821842555316011}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:26,395] Trial 43 finished with value: 0.009680931682124728
and parameters: {'learning_rate': 0.2762957599166905, 'max_depth': 9,
'n_estimators': 482, 'reg_lambda': 0.2504000905571133, 'subsample':
0.8820244176776247}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:26,799] Trial 44 finished with value: 0.008992932151960674
and parameters: {'learning_rate': 0.2738747267531045, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26155381978838654, 'subsample':
0.8815734992812257}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:27,185] Trial 45 finished with value: 0.01007381694540407
and parameters: {'learning_rate': 0.25811395070737103, 'max_depth': 9,
'n_estimators': 480, 'reg_lambda': 0.25783984947871375, 'subsample':
0.8823055255646953}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:27,567] Trial 46 finished with value: 0.010732481298023708
and parameters: {'learning_rate': 0.2783379646749966, 'max_depth': 11,
'n_estimators': 490, 'reg_lambda': 0.2544849741381958, 'subsample':
0.8826928633975394}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:28,027] Trial 47 finished with value: 0.008907884668948342
and parameters: {'learning_rate': 0.2855725920348258, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.24581434835157415, 'subsample':
0.882013526557027}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:28,406] Trial 48 finished with value: 0.009630724944212313
and parameters: {'learning_rate': 0.29366507140819353, 'max_depth': 9,
'n_estimators': 524, 'reg_lambda': 0.2644087564193645, 'subsample':
0.8805720106720308}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:28,795] Trial 49 finished with value: 0.009716445141723798
and parameters: {'learning_rate': 0.27326215062622944, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.236246492586196, 'subsample':
0.8858754623762429}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:29,167] Trial 50 finished with value: 0.010515552920003496
and parameters: {'learning_rate': 0.28221697293363357, 'max_depth': 10,
'n_estimators': 530, 'reg_lambda': 0.2494582574092819, 'subsample':
0.8829854281498173}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:29,548] Trial 51 finished with value: 0.00804151647605496
and parameters: {'learning_rate': 0.2701980015272009, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2696947556789788, 'subsample':

0.8822011856702753}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:29,951] Trial 52 finished with value: 0.008910780803316856
and parameters: {'learning_rate': 0.26631732113811685, 'max_depth': 10,
'n_estimators': 512, 'reg_lambda': 0.269160540670372, 'subsample':
0.8814366893458788}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:30,339] Trial 53 finished with value: 0.009345013844235067
and parameters: {'learning_rate': 0.27655844491818216, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.279983428044716, 'subsample':
0.8817842449431815}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:30,716] Trial 54 finished with value: 0.008262917467408955
and parameters: {'learning_rate': 0.26844955674034493, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.27589124799053927, 'subsample':
0.8822962748919534}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:31,091] Trial 55 finished with value: 0.008607256075051915
and parameters: {'learning_rate': 0.2686421088206769, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.27617185214065304, 'subsample':
0.8823003418935662}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:31,498] Trial 56 finished with value: 0.009484658664881242
and parameters: {'learning_rate': 0.2633364397321207, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.2764749142656809, 'subsample':
0.8822418591100186}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:31,906] Trial 57 finished with value: 0.008713112891104066
and parameters: {'learning_rate': 0.2679943187716196, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.2759106794191, 'subsample':
0.8825624776684956}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:32,299] Trial 58 finished with value: 0.008064809456371263
and parameters: {'learning_rate': 0.2589788289687494, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2705528152518362, 'subsample':
0.8821940860814389}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:33,056] Trial 59 finished with value: 0.008876693679822219
and parameters: {'learning_rate': 0.25566913682823916, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2685377894544741, 'subsample':
0.881893495365793}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:33,583] Trial 60 finished with value: 0.009032587624032484
and parameters: {'learning_rate': 0.25448159659342884, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2709071064699489, 'subsample':
0.8812468019865342}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:34,004] Trial 61 finished with value: 0.007889653584606676
and parameters: {'learning_rate': 0.26966385948835386, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.27610176821829163, 'subsample':
0.8822850992333342}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:34,394] Trial 62 finished with value: 0.009171436849491657
and parameters: {'learning_rate': 0.2593355386088997, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.27091017539016277, 'subsample':
0.8821713774683716}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:34,775] Trial 63 finished with value: 0.00830910521456263
and parameters: {'learning_rate': 0.2703099996348658, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.27995278214668917, 'subsample':

0.8826707972242952}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:35,191] Trial 64 finished with value: 0.010188239600432424
and parameters: {'learning_rate': 0.2646871557990533, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.27659050562156756, 'subsample':
0.8836289538556527}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:35,580] Trial 65 finished with value: 0.009578406798146963
and parameters: {'learning_rate': 0.26264764076725416, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.2255435610340082, 'subsample':
0.8818517429416718}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:37,058] Trial 66 finished with value: 0.009753004983453942
and parameters: {'learning_rate': 0.2746313219028283, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.26633486445348126, 'subsample':
0.8823861503154284}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:39,853] Trial 67 finished with value: 0.009621097455396905
and parameters: {'learning_rate': 0.2521916342444052, 'max_depth': 10,
'n_estimators': 508, 'reg_lambda': 0.27453728805889077, 'subsample':
0.8830761419611245}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:40,480] Trial 68 finished with value: 0.008694525013531013
and parameters: {'learning_rate': 0.2674928273110543, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.27083439852761765, 'subsample':
0.8815412827682133}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:40,849] Trial 69 finished with value: 0.010350071305721655
and parameters: {'learning_rate': 0.2700376354016812, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.265941672371397, 'subsample':
0.8856058038199217}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:41,254] Trial 70 finished with value: 0.008756389043490966
and parameters: {'learning_rate': 0.27181046006445675, 'max_depth': 10,
'n_estimators': 513, 'reg_lambda': 0.277487354384235, 'subsample':
0.8821396891577709}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:41,636] Trial 71 finished with value: 0.009464241210423963
and parameters: {'learning_rate': 0.26986145939351586, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.2727626127015224, 'subsample':
0.8826459679949957}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:42,005] Trial 72 finished with value: 0.009221620497572008
and parameters: {'learning_rate': 0.2712540037650623, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2792412878523748, 'subsample':
0.8827868479052419}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:42,423] Trial 73 finished with value: 0.008912762989507977
and parameters: {'learning_rate': 0.27468674369107593, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.2797874331619134, 'subsample':
0.88411748531789}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:42,807] Trial 74 finished with value: 0.007991287329914467
and parameters: {'learning_rate': 0.2655804461913948, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2678726575417598, 'subsample':
0.8824038750444271}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:43,200] Trial 75 finished with value: 0.009809654065572628
and parameters: {'learning_rate': 0.2600973754039064, 'max_depth': 10,
'n_estimators': 511, 'reg_lambda': 0.269306004911918, 'subsample':

0.8824179709867901}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:43,604] Trial 76 finished with value: 0.009618899688488999
and parameters: {'learning_rate': 0.264673345119961, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.2671681443523893, 'subsample':
0.8819588391414921}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:43,988] Trial 77 finished with value: 0.009544087349211984
and parameters: {'learning_rate': 0.2655215928254949, 'max_depth': 10,
'n_estimators': 556, 'reg_lambda': 0.26003614292453653, 'subsample':
0.8849125434816288}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:44,409] Trial 78 finished with value: 0.009750254704308 23
and parameters: {'learning_rate': 0.2621322864213918, 'max_depth': 10,
'n_estimators': 516, 'reg_lambda': 0.27324324710275544, 'subsample':
0.8821381917039126}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:44,785] Trial 79 finished with value: 0.008587686018124239
and parameters: {'learning_rate': 0.2675743912148279, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.26399006257717056, 'subsample':
0.8824930645466953}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:45,157] Trial 80 finished with value: 0.007807346607882591
and parameters: {'learning_rate': 0.2731866922553007, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.27136812474728156, 'subsample':
0.8816407468349482}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:45,563] Trial 81 finished with value: 0.009428431407817161
and parameters: {'learning_rate': 0.2723280116428163, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2748421099462324, 'subsample':
0.8809509093494938}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:45,938] Trial 82 finished with value: 0.008736634235634734
and parameters: {'learning_rate': 0.27348441330082673, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.27099392349190826, 'subsample':
0.8817171549440742}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:46,313] Trial 83 finished with value: 0.009711835810740272
and parameters: {'learning_rate': 0.2691891840958207, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2565004875461445, 'subsample':
0.8816058212347865}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:46,705] Trial 84 finished with value: 0.009333726275138031
and parameters: {'learning_rate': 0.2771946116955945, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.27192905355591923, 'subsample':
0.8813518288177944}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:47,087] Trial 85 finished with value: 0.008469515398599593
and parameters: {'learning_rate': 0.26692310658414503, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.26523389776602596, 'subsample':
0.8820603312171735}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:47,498] Trial 86 finished with value: 0.009016399725048507
and parameters: {'learning_rate': 0.2659315794149806, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.26759347955574825, 'subsample':
0.882988336735535}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:47,882] Trial 87 finished with value: 0.009297399597874489
and parameters: {'learning_rate': 0.27545971353668786, 'max_depth': 10,
'n_estimators': 520, 'reg_lambda': 0.26012137246918665, 'subsample':

0.8833169834919717}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:48,251] Trial 88 finished with value: 0.008788245217484416
and parameters: {'learning_rate': 0.27266051474637365, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26184678648545484, 'subsample':
0.882287358581821}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:48,652] Trial 89 finished with value: 0.009934851905530577
and parameters: {'learning_rate': 0.2791761287360216, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.20003384068903182, 'subsample':
0.8818141909590104}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:49,039] Trial 90 finished with value: 0.00896358830637642
and parameters: {'learning_rate': 0.2709347309895549, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.27473001287906007, 'subsample':
0.883121476259382}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:49,409] Trial 91 finished with value: 0.008531977621757588
and parameters: {'learning_rate': 0.27027827873604054, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.27807651923805693, 'subsample':
0.8826231775862414}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:49,831] Trial 92 finished with value: 0.008742458819197954
and parameters: {'learning_rate': 0.2686066951456963, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.26984372605884444, 'subsample':
0.8829133563997486}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:50,243] Trial 93 finished with value: 0.008508935385397116
and parameters: {'learning_rate': 0.27375180812865246, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.277517282250454, 'subsample':
0.8827649678280929}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:51,629] Trial 94 finished with value: 0.009191152054728854
and parameters: {'learning_rate': 0.2715956581707601, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.27564602834838137, 'subsample':
0.8824244506690324}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:53,242] Trial 95 finished with value: 0.008413931797859923
and parameters: {'learning_rate': 0.269911418590222, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.27286810622125246, 'subsample':
0.8822096659003873}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:54,739] Trial 96 finished with value: 0.009471273788078938
and parameters: {'learning_rate': 0.265154483508001, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.26887960492824564, 'subsample':
0.8846283664956122}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:55,139] Trial 97 finished with value: 0.008855413236258197
and parameters: {'learning_rate': 0.26892610470292055, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.24092333727025078, 'subsample':
0.8826370580604386}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:55,505] Trial 98 finished with value: 0.01039865483431099
and parameters: {'learning_rate': 0.27540505329471093, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.27993684537494845, 'subsample':
0.8837990933216381}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:55,902] Trial 99 finished with value: 0.009473977947654783
and parameters: {'learning_rate': 0.26730694012063844, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.276778497432481, 'subsample':

0.881947098273117}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:56,290] Trial 100 finished with value: 0.008075832626323512
and parameters: {'learning_rate': 0.2630649903830607, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2633066870729938, 'subsample':
0.8823378150466175}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:56,684] Trial 101 finished with value: 0.009390614957509936
and parameters: {'learning_rate': 0.2621950555412822, 'max_depth': 10,
'n_estimators': 538, 'reg_lambda': 0.263151965697475, 'subsample':
0.8823182744689495}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:57,106] Trial 102 finished with value: 0.008827312637977109
and parameters: {'learning_rate': 0.2637630163463737, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.27264120887777643, 'subsample':
0.882544129219413}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:57,493] Trial 103 finished with value: 0.010017648552346886
and parameters: {'learning_rate': 0.2596870061233634, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26522595171283103, 'subsample':
0.882110283133467}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:57,877] Trial 104 finished with value: 0.009288663583243935
and parameters: {'learning_rate': 0.25698296567846257, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.26778910891740954, 'subsample':
0.882414231880511}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:58,332] Trial 105 finished with value: 0.009610642811316218
and parameters: {'learning_rate': 0.2608825151684447, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2744851905948876, 'subsample':
0.8827521741408744}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:58,700] Trial 106 finished with value: 0.009206495767273074
and parameters: {'learning_rate': 0.2666318390485653, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.2080154308567767, 'subsample':
0.881889546202215}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:59,111] Trial 107 finished with value: 0.009268713467146559
and parameters: {'learning_rate': 0.2636651724121877, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.2701783720443127, 'subsample':
0.8843064807566767}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:59,489] Trial 108 finished with value: 0.008890888179706636
and parameters: {'learning_rate': 0.27064925267892004, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.25271961489140615, 'subsample':
0.8814684205094284}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:53:59,877] Trial 109 finished with value: 0.008869050554091724
and parameters: {'learning_rate': 0.26804967182322925, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.25726848085688736, 'subsample':
0.8817024947933195}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:00,277] Trial 110 finished with value: 0.008495948410497561
and parameters: {'learning_rate': 0.27266067720700576, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.27818674794821324, 'subsample':
0.8822472262073662}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:00,659] Trial 111 finished with value: 0.008477580564203484
and parameters: {'learning_rate': 0.2696911136955546, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2730926569771432, 'subsample':

0.8822217406027825}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:01,045] Trial 112 finished with value: 0.008778626021351888
and parameters: {'learning_rate': 0.2697380998206491, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.27206744174872416, 'subsample':
0.8825081714783228}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:01,448] Trial 113 finished with value: 0.009050787776711904
and parameters: {'learning_rate': 0.27144469216261524, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.27556466130664, 'subsample':
0.8820226004739562}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:01,825] Trial 114 finished with value: 0.008841788555858794
and parameters: {'learning_rate': 0.27420165517642325, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2674659597710219, 'subsample':
0.8828819941423431}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:02,219] Trial 115 finished with value: 0.009022792034252644
and parameters: {'learning_rate': 0.26617293514016666, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2645227270770693, 'subsample':
0.8852008334224487}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:02,585] Trial 116 finished with value: 0.008860391383436524
and parameters: {'learning_rate': 0.26860277300684743, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2599078504048183, 'subsample':
0.8821357755538414}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:02,974] Trial 117 finished with value: 0.009838963335669144
and parameters: {'learning_rate': 0.2581081643216154, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.26981575440182576, 'subsample':
0.8823630963026822}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:03,370] Trial 118 finished with value: 0.00927402306426622
and parameters: {'learning_rate': 0.2722470749623293, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2787284590257849, 'subsample':
0.8826192053585045}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:03,773] Trial 119 finished with value: 0.00886649722235461
and parameters: {'learning_rate': 0.2705275580153382, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.27369168435609925, 'subsample':
0.8818098283577842}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:04,144] Trial 120 finished with value: 0.009317299036458743
and parameters: {'learning_rate': 0.27681140764777196, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.23360652783197924, 'subsample':
0.8855787938221309}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:04,527] Trial 121 finished with value: 0.008489610992611635
and parameters: {'learning_rate': 0.2661487924969381, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.26550830998062386, 'subsample':
0.8820890458911276}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:05,965] Trial 122 finished with value: 0.008094576134373272
and parameters: {'learning_rate': 0.267540710870132, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2622085505608846, 'subsample':
0.8820413513458681}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:07,684] Trial 123 finished with value: 0.008349770397024966
and parameters: {'learning_rate': 0.2675240498384787, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2613451516115026, 'subsample':

0.8822055927003434}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:09,085] Trial 124 finished with value: 0.008533045363301883
and parameters: {'learning_rate': 0.26776247620151, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2612531370314089, 'subsample':
0.8819540316907445}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:09,583] Trial 125 finished with value: 0.008070244351684894
and parameters: {'learning_rate': 0.2651567584382117, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2629113588401076, 'subsample':
0.8824050804362298}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:09,979] Trial 126 finished with value: 0.008455274503802273
and parameters: {'learning_rate': 0.26529557691981576, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2556675456790134, 'subsample':
0.882518779956591}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:10,365] Trial 127 finished with value: 0.008760223889671096
and parameters: {'learning_rate': 0.26261168434264753, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.26329644600135926, 'subsample':
0.8823575681636947}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:10,772] Trial 128 finished with value: 0.00908947787336503
and parameters: {'learning_rate': 0.26437181603889487, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.2686183848886421, 'subsample':
0.8817191343227482}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:11,175] Trial 129 finished with value: 0.008951867748241981
and parameters: {'learning_rate': 0.26148106347339456, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.22668370112796674, 'subsample':
0.8826785013738517}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:11,604] Trial 130 finished with value: 0.00866853016842696
and parameters: {'learning_rate': 0.26906609763810624, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.25857480625853047, 'subsample':
0.8811232603629089}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:11,989] Trial 131 finished with value: 0.00840680412490369
and parameters: {'learning_rate': 0.26718985797223427, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2612434603326219, 'subsample':
0.8822136246430177}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:12,390] Trial 132 finished with value: 0.008736406747975751
and parameters: {'learning_rate': 0.27343096452249177, 'max_depth': 10,
'n_estimators': 568, 'reg_lambda': 0.26604099181030305, 'subsample':
0.882426142018955}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:12,827] Trial 133 finished with value: 0.008352623404268723
and parameters: {'learning_rate': 0.2645372842761155, 'max_depth': 10,
'n_estimators': 546, 'reg_lambda': 0.2623154325002101, 'subsample':
0.8820376667510915}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:13,202] Trial 134 finished with value: 0.009056838029195918
and parameters: {'learning_rate': 0.26824018528642257, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2637430853061134, 'subsample':
0.8819084726427229}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:13,606] Trial 135 finished with value: 0.008579845058931187
and parameters: {'learning_rate': 0.2667708177733141, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2583216030312132, 'subsample':

0.8822802530144913}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:14,015] Trial 136 finished with value: 0.008901063597054157
and parameters: {'learning_rate': 0.27175627875478425, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.27712456669164587, 'subsample':
0.8825218270104921}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:14,403] Trial 137 finished with value: 0.009240646572033365
and parameters: {'learning_rate': 0.2708043808393204, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2602515022311689, 'subsample':
0.8827901158919215}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:14,837] Trial 138 finished with value: 0.009160056775652712
and parameters: {'learning_rate': 0.25430215571456655, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.2667214681274411, 'subsample':
0.8816070645611814}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:15,238] Trial 139 finished with value: 0.008896590507776808
and parameters: {'learning_rate': 0.26320533313140027, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.27126369307840226, 'subsample':
0.8801407178835543}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:15,681] Trial 140 finished with value: 0.009306625407198857
and parameters: {'learning_rate': 0.26534100613822453, 'max_depth': 10,
'n_estimators': 511, 'reg_lambda': 0.2756485154384235, 'subsample':
0.882131067996973}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:16,098] Trial 141 finished with value: 0.009343575982105118
and parameters: {'learning_rate': 0.2642420248157531, 'max_depth': 10,
'n_estimators': 543, 'reg_lambda': 0.2616017731907823, 'subsample':
0.8820334063465566}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:16,474] Trial 142 finished with value: 0.008116003748052237
and parameters: {'learning_rate': 0.2676946001952739, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2639099351679836, 'subsample':
0.8823570887762496}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:16,883] Trial 143 finished with value: 0.008375196394444015
and parameters: {'learning_rate': 0.26777402852551824, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2640644364332669, 'subsample':
0.8823468091898595}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:17,267] Trial 144 finished with value: 0.008064291026068792
and parameters: {'learning_rate': 0.26862492629376417, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26800555345613625, 'subsample':
0.8822179377502161}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:17,653] Trial 145 finished with value: 0.008383938874683049
and parameters: {'learning_rate': 0.2694394704025061, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26766101569798906, 'subsample':
0.8824574002159057}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:18,045] Trial 146 finished with value: 0.00859394649790512
and parameters: {'learning_rate': 0.2729492733821194, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26928099575384407, 'subsample':
0.8826557730453914}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:18,429] Trial 147 finished with value: 0.010161215403557224
and parameters: {'learning_rate': 0.2662749495387327, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.2654731188813669, 'subsample':

0.883131846883263}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:18,859] Trial 148 finished with value: 0.009201929254278882
and parameters: {'learning_rate': 0.26869578951439876, 'max_depth': 10,
'n_estimators': 530, 'reg_lambda': 0.27129603034445554, 'subsample':
0.883617102529552}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:19,286] Trial 149 finished with value: 0.009074620088944302
and parameters: {'learning_rate': 0.27064582933864084, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.2740295494690427, 'subsample':
0.8822943730239846}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:20,659] Trial 150 finished with value: 0.009517244707702868
and parameters: {'learning_rate': 0.2749610180103612, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2790860971007897, 'subsample':
0.8818511228843195}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:21,815] Trial 151 finished with value: 0.008782783328058888
and parameters: {'learning_rate': 0.26703776204251456, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2629005527473442, 'subsample':
0.8821928361484979}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:22,984] Trial 152 finished with value: 0.009349131937366759
and parameters: {'learning_rate': 0.26981588787312155, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.25963441329690634, 'subsample':
0.8823836936432897}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:24,397] Trial 153 finished with value: 0.008628889710504134
and parameters: {'learning_rate': 0.265519211405393, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.26605472645092804, 'subsample':
0.8825373390917066}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:24,767] Trial 154 finished with value: 0.00897377503877932
and parameters: {'learning_rate': 0.2680183035442354, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2567564358322521, 'subsample':
0.8821858303548638}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:25,185] Trial 155 finished with value: 0.009139181008207606
and parameters: {'learning_rate': 0.2717854864138264, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26846852832368556, 'subsample':
0.8839770588846301}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:25,559] Trial 156 finished with value: 0.009073416378355395
and parameters: {'learning_rate': 0.26911957906574074, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.27704168719720057, 'subsample':
0.8819788870606247}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:25,947] Trial 157 finished with value: 0.008761812730717295
and parameters: {'learning_rate': 0.2672188829788215, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.21718186345128265, 'subsample':
0.8822866822523393}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:26,358] Trial 158 finished with value: 0.0081880475829551
and parameters: {'learning_rate': 0.27097380328945886, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26440964455711924, 'subsample':
0.8827114335493558}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:26,724] Trial 159 finished with value: 0.008613580609121454
and parameters: {'learning_rate': 0.27260827683789257, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.265051405000508, 'subsample':

0.883404122284644}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:27,113] Trial 160 finished with value: 0.008802196910753637
and parameters: {'learning_rate': 0.27080602833254924, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.27023162622110214, 'subsample':
0.8829785050551693}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:27,519] Trial 161 finished with value: 0.00938707451195749
and parameters: {'learning_rate': 0.2699861396291999, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26284857377778537, 'subsample':
0.8824644437810542}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:27,907] Trial 162 finished with value: 0.008290229249410301
and parameters: {'learning_rate': 0.26822779614961595, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.26685479186811906, 'subsample':
0.8827347891625664}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:28,374] Trial 163 finished with value: 0.00819548269243294
and parameters: {'learning_rate': 0.2687385858907006, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2643492898493186, 'subsample':
0.882715515990365}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:28,751] Trial 164 finished with value: 0.008031082016173075
and parameters: {'learning_rate': 0.2685838805107278, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2674059084510046, 'subsample':
0.8827456361791424}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:29,130] Trial 165 finished with value: 0.007958049321257425
and parameters: {'learning_rate': 0.27381217425863213, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.2640763510928492, 'subsample':
0.8825664750361425}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:29,551] Trial 166 finished with value: 0.009591187085891155
and parameters: {'learning_rate': 0.2742421005391755, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2638971169659642, 'subsample':
0.8828686066802351}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:29,939] Trial 167 finished with value: 0.007869124333008001
and parameters: {'learning_rate': 0.2736045064836797, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.2644002289606874, 'subsample':
0.8826606798261112}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:30,375] Trial 168 finished with value: 0.008839752215341218
and parameters: {'learning_rate': 0.2763159266488777, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.2673652097974102, 'subsample':
0.8825931567192947}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:30,739] Trial 169 finished with value: 0.008693434646866935
and parameters: {'learning_rate': 0.2736409033417881, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2647936357745958, 'subsample':
0.882798794718023}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:31,147] Trial 170 finished with value: 0.009977321937837657
and parameters: {'learning_rate': 0.27158289921351475, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.26794636102840025, 'subsample':
0.8829258353025498}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:31,559] Trial 171 finished with value: 0.00944999685177494
and parameters: {'learning_rate': 0.27551239444980624, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.262250936021056, 'subsample':

0.8826010622531572}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:31,951] Trial 172 finished with value: 0.008571980184612322
and parameters: {'learning_rate': 0.27296693352829327, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.26430960985839663, 'subsample':
0.8827264534058743}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:32,330] Trial 173 finished with value: 0.008633241121820403
and parameters: {'learning_rate': 0.2742849847216833, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.26041981073528847, 'subsample':
0.8824424261719885}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:32,710] Trial 174 finished with value: 0.008770407583560756
and parameters: {'learning_rate': 0.2715484886247391, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26639562126374017, 'subsample':
0.8831092509824341}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:33,099] Trial 175 finished with value: 0.00851170550237577
and parameters: {'learning_rate': 0.26594906597915274, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.26930353952983893, 'subsample':
0.8825518869950036}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:33,510] Trial 176 finished with value: 0.008535299198845207
and parameters: {'learning_rate': 0.2781807472113164, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.262413501847817, 'subsample':
0.8823741663896036}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:33,912] Trial 177 finished with value: 0.008411288533555774
and parameters: {'learning_rate': 0.26909904633597287, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26500284873442237, 'subsample':
0.8827125765289497}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:34,360] Trial 178 finished with value: 0.008792863710128399
and parameters: {'learning_rate': 0.2703663841792837, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.25853151831291304, 'subsample':
0.884710924131536}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:35,674] Trial 179 finished with value: 0.008690453580788323
and parameters: {'learning_rate': 0.25878430276375747, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26677925164991884, 'subsample':
0.8821365275063043}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:37,284] Trial 180 finished with value: 0.008580142110470628
and parameters: {'learning_rate': 0.27240922736155854, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.2639496935576969, 'subsample':
0.8824524791890729}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:39,233] Trial 181 finished with value: 0.008681663000062099
and parameters: {'learning_rate': 0.2664046423149964, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.2711160697470311, 'subsample':
0.8822863239218964}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:39,636] Trial 182 finished with value: 0.00895128757278711
and parameters: {'learning_rate': 0.2683906782207624, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.269529528120534, 'subsample':
0.8820727794467863}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:40,055] Trial 183 finished with value: 0.009676506848717044
and parameters: {'learning_rate': 0.25625133754711826, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26281345650985943, 'subsample':

0.8826396844385601}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:40,442] Trial 184 finished with value: 0.008623221976723678
and parameters: {'learning_rate': 0.26058610289718603, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2678341565961581, 'subsample':
0.8843411275385182}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:40,838] Trial 185 finished with value: 0.008224560841693445
and parameters: {'learning_rate': 0.2695016933118587, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2718739468728599, 'subsample':
0.8822937449899064}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:41,234] Trial 186 finished with value: 0.009466334691060839
and parameters: {'learning_rate': 0.2694336823604325, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2729718027381039, 'subsample':
0.8828606766274646}. Best is trial 22 with value: 0.0077302712276656315.
[I 2024-08-30 19:54:41,632] Trial 187 finished with value: 0.007533649802326404
and parameters: {'learning_rate': 0.2708777125643791, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2660093049253543, 'subsample':
0.8823589473616908}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:42,059] Trial 188 finished with value: 0.010052641793571784
and parameters: {'learning_rate': 0.2734195267663765, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26629015291558655, 'subsample':
0.8850416945927356}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:42,446] Trial 189 finished with value: 0.008702741423377182
and parameters: {'learning_rate': 0.27120408189996575, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2649614266007089, 'subsample':
0.882526286725107}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:42,857] Trial 190 finished with value: 0.008594480940971988
and parameters: {'learning_rate': 0.27249611983165056, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2610092717447235, 'subsample':
0.8824143449791285}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:43,251] Trial 191 finished with value: 0.009602301951778473
and parameters: {'learning_rate': 0.2699755627641568, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.24752309901726435, 'subsample':
0.8822704067456627}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:43,641] Trial 192 finished with value: 0.008300951155130938
and parameters: {'learning_rate': 0.26733648354059764, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2688607744292948, 'subsample':
0.882139824415081}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:44,059] Trial 193 finished with value: 0.007901120970170766
and parameters: {'learning_rate': 0.2748118120042785, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.27190187383751313, 'subsample':
0.8824081578182219}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:44,441] Trial 194 finished with value: 0.009836423350074707
and parameters: {'learning_rate': 0.27469132018288317, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2636776914466497, 'subsample':
0.882578777264805}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:44,822] Trial 195 finished with value: 0.008923194717313771
and parameters: {'learning_rate': 0.27358474955855483, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2659055672801441, 'subsample':

0.882412685441843}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:45,238] Trial 196 finished with value: 0.008435950257583556
and parameters: {'learning_rate': 0.2754782376912432, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2707673042022514, 'subsample':
0.884096115060021}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:45,636] Trial 197 finished with value: 0.008079288762318759
and parameters: {'learning_rate': 0.2652538623241663, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.25949612188795845, 'subsample':
0.8819613802046476}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:46,067] Trial 198 finished with value: 0.009159625646609881
and parameters: {'learning_rate': 0.26472072638646116, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.26850678470128275, 'subsample':
0.8819768247469045}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:46,468] Trial 199 finished with value: 0.009131370682079086
and parameters: {'learning_rate': 0.2633696581332909, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.25949154756519033, 'subsample':
0.8819132936862539}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:46,851] Trial 200 finished with value: 0.008657319137932001
and parameters: {'learning_rate': 0.26552971295546485, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26265295426993435, 'subsample':
0.8827081447745406}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:47,285] Trial 201 finished with value: 0.008727383474455633
and parameters: {'learning_rate': 0.2667657300970598, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26115469927227075, 'subsample':
0.8821552338565887}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:47,682] Trial 202 finished with value: 0.008725170624361933
and parameters: {'learning_rate': 0.2709770376257303, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2645426900759263, 'subsample':
0.8822973855378385}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:48,106] Trial 203 finished with value: 0.009281210394920613
and parameters: {'learning_rate': 0.27215743660143715, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2665436715220853, 'subsample':
0.8817969139991026}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:48,486] Trial 204 finished with value: 0.009961468185784882
and parameters: {'learning_rate': 0.2744779349698813, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2622630439592346, 'subsample':
0.8820550927721629}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:48,873] Trial 205 finished with value: 0.008495008038922334
and parameters: {'learning_rate': 0.2682768462630303, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26790687560944576, 'subsample':
0.8825287366053605}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:49,301] Trial 206 finished with value: 0.009584109716798912
and parameters: {'learning_rate': 0.27698545836732535, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.2639828362172119, 'subsample':
0.8823744103582385}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:50,709] Trial 207 finished with value: 0.00824121198159552
and parameters: {'learning_rate': 0.2646687824817375, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2610014624434798, 'subsample':

0.8821830472093786}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:52,451] Trial 208 finished with value: 0.008816671397100448
and parameters: {'learning_rate': 0.2674857470344715, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2703046130350136, 'subsample':
0.8824854156367345}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:53,616] Trial 209 finished with value: 0.008101872832797967
and parameters: {'learning_rate': 0.2731340161272622, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.2584583134238845, 'subsample':
0.8828082880555401}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:54,035] Trial 210 finished with value: 0.009026022623514304
and parameters: {'learning_rate': 0.261915866020802, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.2551871277367878, 'subsample':
0.8828479704017579}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:54,445] Trial 211 finished with value: 0.009031822716830 29
and parameters: {'learning_rate': 0.2731016331566304, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.25842098116065837, 'subsample':
0.882690917151434}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:54,816] Trial 212 finished with value: 0.008810875365058573
and parameters: {'learning_rate': 0.276098549081962, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.25962856020660885, 'subsample':
0.8823317033779364}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:55,204] Trial 213 finished with value: 0.008283275405304508
and parameters: {'learning_rate': 0.2719605684797166, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.26525286191984093, 'subsample':
0.882605316191181}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:55,605] Trial 214 finished with value: 0.009259479253738071
and parameters: {'learning_rate': 0.27388890412504147, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.26276404612961995, 'subsample':
0.883004843891156}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:55,995] Trial 215 finished with value: 0.010099021602722063
and parameters: {'learning_rate': 0.2708452163292085, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.25665707370224927, 'subsample':
0.8832485749325337}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:56,405] Trial 216 finished with value: 0.007835744947901983
and parameters: {'learning_rate': 0.26597675982905034, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26697597224383157, 'subsample':
0.8820496898398832}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:56,789] Trial 217 finished with value: 0.00863453401351452
and parameters: {'learning_rate': 0.26604687740328026, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.2667465143587423, 'subsample':
0.8820380067625055}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:57,198] Trial 218 finished with value: 0.009213951828828537
and parameters: {'learning_rate': 0.26354408593145706, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2701775932821539, 'subsample':
0.8828062952491689}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:57,606] Trial 219 finished with value: 0.008803790568239976
and parameters: {'learning_rate': 0.2667886760729841, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2678786738640466, 'subsample':

0.8816807253197084}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:57,994] Trial 220 finished with value: 0.009245611693420377
and parameters: {'learning_rate': 0.2654038050410893, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26526122895467363, 'subsample':
0.8837790533118649}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:58,402] Trial 221 finished with value: 0.009146559560262267
and parameters: {'learning_rate': 0.26880189824441136, 'max_depth': 10,
'n_estimators': 552, 'reg_lambda': 0.26294401860807587, 'subsample':
0.882165636278222}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:58,827] Trial 222 finished with value: 0.007956577833682098
and parameters: {'learning_rate': 0.2729073682124056, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26164784013049247, 'subsample':
0.8822835210018158}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:59,229] Trial 223 finished with value: 0.007943863233170298
and parameters: {'learning_rate': 0.26771834403932193, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26076736887649765, 'subsample':
0.8824542663419372}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:54:59,629] Trial 224 finished with value: 0.00947776936891343
and parameters: {'learning_rate': 0.274951507512749, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.26015720217175914, 'subsample':
0.8824319935969223}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:00,015] Trial 225 finished with value: 0.008879488796913441
and parameters: {'learning_rate': 0.2677230224866875, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2584752023367972, 'subsample':
0.8822441017167035}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:00,425] Trial 226 finished with value: 0.008227514106076665
and parameters: {'learning_rate': 0.2665658157964714, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26131562445557627, 'subsample':
0.8823439219711627}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:00,830] Trial 227 finished with value: 0.00864325258501472
and parameters: {'learning_rate': 0.27272484303072514, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2725680675744234, 'subsample':
0.8824801333813082}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:01,248] Trial 228 finished with value: 0.010127436146858624
and parameters: {'learning_rate': 0.2650205086633887, 'max_depth': 11,
'n_estimators': 485, 'reg_lambda': 0.2692723459373126, 'subsample':
0.8820666739375203}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:01,653] Trial 229 finished with value: 0.008212358380056614
and parameters: {'learning_rate': 0.2701065628373571, 'max_depth': 10,
'n_estimators': 525, 'reg_lambda': 0.2619540993703457, 'subsample':
0.8822335989344625}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:02,066] Trial 230 finished with value: 0.008567565761895983
and parameters: {'learning_rate': 0.271445291984326, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.2744267881902551, 'subsample':
0.882550058949844}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:02,479] Trial 231 finished with value: 0.009457724546282999
and parameters: {'learning_rate': 0.2689091269844046, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26362464096463983, 'subsample':

0.8826535881944293}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:02,916] Trial 232 finished with value: 0.008919036782579581
and parameters: {'learning_rate': 0.2680644259860595, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2657109757077078, 'subsample':
0.8823931532807272}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:03,311] Trial 233 finished with value: 0.00856869153561286
and parameters: {'learning_rate': 0.269451212771271, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.264346695135615, 'subsample':
0.8823104433167898}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:03,769] Trial 234 finished with value: 0.008425186430801057
and parameters: {'learning_rate': 0.26728084817460585, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2670286299359229, 'subsample':
0.8827269661971763}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:05,491] Trial 235 finished with value: 0.00895837884814919
and parameters: {'learning_rate': 0.2658607142178644, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.26082230027529235, 'subsample':
0.8819010303595098}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:07,147] Trial 236 finished with value: 0.008031941430997641
and parameters: {'learning_rate': 0.27418064784761714, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2634074478049046, 'subsample':
0.8825487999689865}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:08,729] Trial 237 finished with value: 0.008585307634606866
and parameters: {'learning_rate': 0.2736606712565539, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26314159481515803, 'subsample':
0.8824765890896734}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:09,129] Trial 238 finished with value: 0.009661229956617449
and parameters: {'learning_rate': 0.275051323211245, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2664952273879148, 'subsample':
0.8821773848546564}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:09,505] Trial 239 finished with value: 0.008798722169395009
and parameters: {'learning_rate': 0.272676029292157, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.25942835005348136, 'subsample':
0.88259860777854}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:09,882] Trial 240 finished with value: 0.009592275450921162
and parameters: {'learning_rate': 0.27406248714835096, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.25748021884782935, 'subsample':
0.8814862240031689}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:10,307] Trial 241 finished with value: 0.009103905153495349
and parameters: {'learning_rate': 0.27204524900277166, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2646062288207626, 'subsample':
0.8823810397589565}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:10,723] Trial 242 finished with value: 0.008748126237952566
and parameters: {'learning_rate': 0.27040953491569664, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.26198197405264745, 'subsample':
0.8829397328064762}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:11,178] Trial 243 finished with value: 0.008844030740682685
and parameters: {'learning_rate': 0.2684427880059305, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.26361486955864033, 'subsample':

0.8827794941917807}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:11,577] Trial 244 finished with value: 0.009076845054355673
and parameters: {'learning_rate': 0.2666400986017401, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26856926071245313, 'subsample':
0.882569633446258}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:11,962] Trial 245 finished with value: 0.00827536580355631
and parameters: {'learning_rate': 0.27327864868974655, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26518627941370476, 'subsample':
0.8822538729556006}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:12,403] Trial 246 finished with value: 0.009459692261047007
and parameters: {'learning_rate': 0.2640275359683659, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.2720112569158967, 'subsample':
0.8813103408394549}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:12,818] Trial 247 finished with value: 0.010774645201920511
and parameters: {'learning_rate': 0.2712172543872178, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.24231691604039926, 'subsample':
0.8824836910860936}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:13,258] Trial 248 finished with value: 0.009284525350640109
and parameters: {'learning_rate': 0.2758986075717851, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2613458442743428, 'subsample':
0.8826539307467789}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:13,656] Trial 249 finished with value: 0.008155996560753347
and parameters: {'learning_rate': 0.2692933739327633, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.2672237103885748, 'subsample':
0.8820133043429024}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:14,050] Trial 250 finished with value: 0.010021915002431617
and parameters: {'learning_rate': 0.2744882389334852, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.26741457690003784, 'subsample':
0.8820135780687355}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:14,492] Trial 251 finished with value: 0.007854819634907764
and parameters: {'learning_rate': 0.2695585663702946, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2704455974652363, 'subsample':
0.8818213045117639}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:14,886] Trial 252 finished with value: 0.008120010891678728
and parameters: {'learning_rate': 0.26954076208143135, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2691083311896716, 'subsample':
0.8818935677523655}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:15,342] Trial 253 finished with value: 0.009374698242749101
and parameters: {'learning_rate': 0.26732917575931864, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.27055588914588236, 'subsample':
0.8817104238227701}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:15,742] Trial 254 finished with value: 0.007987378600654493
and parameters: {'learning_rate': 0.2698412001735983, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.26958129596792374, 'subsample':
0.8817945046777185}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:16,191] Trial 255 finished with value: 0.009446045380467748
and parameters: {'learning_rate': 0.2626273011665528, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.27194540310713766, 'subsample':

0.8817309909113726}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:16,563] Trial 256 finished with value: 0.011230551842301633
and parameters: {'learning_rate': 0.2921103648507762, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.26941676688348354, 'subsample':
0.8819024465919935}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:16,960] Trial 257 finished with value: 0.007958851944751434
and parameters: {'learning_rate': 0.2658526479894571, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.27093282162290405, 'subsample':
0.8821460055434902}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:17,415] Trial 258 finished with value: 0.008420828508776927
and parameters: {'learning_rate': 0.25465617893474424, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.27350760087795756, 'subsample':
0.8818409836203644}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:17,819] Trial 259 finished with value: 0.009193587983882662
and parameters: {'learning_rate': 0.26541209658674686, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.2704204646807644, 'subsample':
0.8815278734348183}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:18,271] Trial 260 finished with value: 0.009292716885238767
and parameters: {'learning_rate': 0.2519067819613903, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.2728352153140213, 'subsample':
0.8820826696454432}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:18,859] Trial 261 finished with value: 0.009201996793811625
and parameters: {'learning_rate': 0.2647740328228513, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.2714266560164338, 'subsample':
0.8817711284628854}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:20,825] Trial 262 finished with value: 0.00920106783064836
and parameters: {'learning_rate': 0.26603760271758675, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.27482144752549226, 'subsample':
0.881641740336404}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:22,044] Trial 263 finished with value: 0.008301774139389137
and parameters: {'learning_rate': 0.27255162570451047, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.2686765584710653, 'subsample':
0.8821294762136482}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:23,728] Trial 264 finished with value: 0.00935811730671682
and parameters: {'learning_rate': 0.2639535923341527, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.27050640979609775, 'subsample':
0.8859970199032755}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:24,118] Trial 265 finished with value: 0.008366372988879165
and parameters: {'learning_rate': 0.2737526279585731, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.2681172135857309, 'subsample':
0.8819589065037635}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:24,512] Trial 266 finished with value: 0.008787796894077488
and parameters: {'learning_rate': 0.2704074118156839, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.27614998191525697, 'subsample':
0.8822222043692067}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:24,927] Trial 267 finished with value: 0.009254217346699371
and parameters: {'learning_rate': 0.2665627157189649, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.27178283168350265, 'subsample':

0.8821205712172494}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:25,322] Trial 268 finished with value: 0.009493508400318934
and parameters: {'learning_rate': 0.27539107111715216, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.26951829552466494, 'subsample':
0.8818247080130363}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:25,723] Trial 269 finished with value: 0.008936602175933827
and parameters: {'learning_rate': 0.26814603938168197, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.2737463278977568, 'subsample':
0.882286534536859}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:26,113] Trial 270 finished with value: 0.009762036276135672
and parameters: {'learning_rate': 0.271798324121636, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.22285755279192204, 'subsample':
0.8819925729753157}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:26,510] Trial 271 finished with value: 0.009299249957379598
and parameters: {'learning_rate': 0.2731805649594816, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2780338564348086, 'subsample':
0.8823785854225081}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:26,939] Trial 272 finished with value: 0.008738436993312892
and parameters: {'learning_rate': 0.25906366289819954, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.2665292167868827, 'subsample':
0.8816219859821084}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:27,373] Trial 273 finished with value: 0.007638112547271349
and parameters: {'learning_rate': 0.2651775093839958, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.26024432290144306, 'subsample':
0.8822042732476822}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:27,833] Trial 274 finished with value: 0.007957978142601149
and parameters: {'learning_rate': 0.2632274229702111, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.25972598282756093, 'subsample':
0.8821883000916069}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:28,252] Trial 275 finished with value: 0.00799154724809305
and parameters: {'learning_rate': 0.26289494641430894, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2593900080760693, 'subsample':
0.8821855070757303}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:28,651] Trial 276 finished with value: 0.009011573224185106
and parameters: {'learning_rate': 0.26316143542462783, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.20854867548189032, 'subsample':
0.8822527694896848}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:29,092] Trial 277 finished with value: 0.008756509135098603
and parameters: {'learning_rate': 0.2617758488921619, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.270360574083368, 'subsample':
0.8821706357062911}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:29,505] Trial 278 finished with value: 0.008489115197552617
and parameters: {'learning_rate': 0.26109948388864745, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.25301944492619916, 'subsample':
0.8823580217641451}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:29,936] Trial 279 finished with value: 0.008285992046533878
and parameters: {'learning_rate': 0.2627383458872389, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2606106807976421, 'subsample':

0.8821894524133318}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:30,375] Trial 280 finished with value: 0.008653099049991115
and parameters: {'learning_rate': 0.2644408622281616, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26829267906377713, 'subsample':
0.882423562133322}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:30,811] Trial 281 finished with value: 0.008181563432361186
and parameters: {'learning_rate': 0.26306824497062875, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26597317014334787, 'subsample':
0.8823164690790471}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:31,238] Trial 282 finished with value: 0.008927872945622367
and parameters: {'learning_rate': 0.2870102886692959, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.27995768673552196, 'subsample':
0.8855727885177259}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:31,664] Trial 283 finished with value: 0.010022968886545698
and parameters: {'learning_rate': 0.25732917992320076, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2723048991512797, 'subsample':
0.8820818257987217}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:32,108] Trial 284 finished with value: 0.010060804980713997
and parameters: {'learning_rate': 0.26386084949842903, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2755912649650267, 'subsample':
0.8824757878867002}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:32,540] Trial 285 finished with value: 0.008336821135393158
and parameters: {'learning_rate': 0.26483595787869313, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26926225516909924, 'subsample':
0.8822292214540357}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:32,975] Trial 286 finished with value: 0.008524835301974051
and parameters: {'learning_rate': 0.2606379458648043, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2597372416639521, 'subsample':
0.8823300509741182}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:33,410] Trial 287 finished with value: 0.007983608046256606
and parameters: {'learning_rate': 0.2657844565381632, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26250373318710063, 'subsample':
0.8820975779518214}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:34,244] Trial 288 finished with value: 0.010607262260435457
and parameters: {'learning_rate': 0.2969711882946313, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2570823994880473, 'subsample':
0.8820967479378679}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:35,875] Trial 289 finished with value: 0.009131096596382652
and parameters: {'learning_rate': 0.2660311890410708, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2711818729975225, 'subsample':
0.880622126243282}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:37,219] Trial 290 finished with value: 0.008962008703727108
and parameters: {'learning_rate': 0.2656360263087477, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2619332101971639, 'subsample':
0.8821565910005505}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:38,899] Trial 291 finished with value: 0.009021269628267164
and parameters: {'learning_rate': 0.2666137821730948, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.21161590357244914, 'subsample':

0.8825008175112204}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:39,333] Trial 292 finished with value: 0.008426610697979165
and parameters: {'learning_rate': 0.2703314320659684, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.26698604529228526, 'subsample':
0.88198155643852}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:39,717] Trial 293 finished with value: 0.00907405164622599
and parameters: {'learning_rate': 0.26906866923152767, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26559276673240356, 'subsample':
0.8822464593806644}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:40,105] Trial 294 finished with value: 0.009097243257045725
and parameters: {'learning_rate': 0.267688473996411, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.26847577217475094, 'subsample':
0.8818448331060261}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:40,548] Trial 295 finished with value: 0.010281498077033232
and parameters: {'learning_rate': 0.26446764082795843, 'max_depth': 10,
'n_estimators': 518, 'reg_lambda': 0.27367357674745035, 'subsample':
0.8821222320578272}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:40,949] Trial 296 finished with value: 0.009596722522010265
and parameters: {'learning_rate': 0.2713174600251812, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.26017337826289805, 'subsample':
0.8841845216944372}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:41,395] Trial 297 finished with value: 0.009344048844865546
and parameters: {'learning_rate': 0.2699559226439744, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2634791317392998, 'subsample':
0.8844741263691513}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:41,795] Trial 298 finished with value: 0.008297191853681217
and parameters: {'learning_rate': 0.2744837134333304, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26974541474276004, 'subsample':
0.8824270890735044}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:42,206] Trial 299 finished with value: 0.007989429239599747
and parameters: {'learning_rate': 0.2668908601628934, 'max_depth': 10,
'n_estimators': 537, 'reg_lambda': 0.26254005632817323, 'subsample':
0.8825662249932499}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:42,656] Trial 300 finished with value: 0.009716182101380772
and parameters: {'learning_rate': 0.26688630731163365, 'max_depth': 10,
'n_estimators': 532, 'reg_lambda': 0.277812472829266, 'subsample':
0.8825542753214595}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:43,044] Trial 301 finished with value: 0.008978153240644809
and parameters: {'learning_rate': 0.2684694550172372, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2677170860729427, 'subsample':
0.8820458850178983}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:43,474] Trial 302 finished with value: 0.008367115476829959
and parameters: {'learning_rate': 0.2679183524410388, 'max_depth': 10,
'n_estimators': 540, 'reg_lambda': 0.2716415712533575, 'subsample':
0.8813912454342506}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:43,864] Trial 303 finished with value: 0.009229779784733688
and parameters: {'learning_rate': 0.27182650837355604, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2585349340103118, 'subsample':

0.8822170417744549}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:44,277] Trial 304 finished with value: 0.008746958511491834
and parameters: {'learning_rate': 0.26714943898778076, 'max_depth': 10,
'n_estimators': 523, 'reg_lambda': 0.2608993155981055, 'subsample':
0.8825890894107917}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:44,710] Trial 305 finished with value: 0.009224832855274282
and parameters: {'learning_rate': 0.2697560442248177, 'max_depth': 10,
'n_estimators': 534, 'reg_lambda': 0.23720200730795826, 'subsample':
0.8817638456667074}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:45,134] Trial 306 finished with value: 0.007827459320551703
and parameters: {'learning_rate': 0.2661329215991942, 'max_depth': 10,
'n_estimators': 514, 'reg_lambda': 0.26561681908846124, 'subsample':
0.8819276509722707}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:46,669] Trial 307 finished with value: 0.008308254298046725
and parameters: {'learning_rate': 0.26580357020804085, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.26539875876720764, 'subsample':
0.8818942399050405}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:48,451] Trial 308 finished with value: 0.007949322470100136
and parameters: {'learning_rate': 0.26646339376852446, 'max_depth': 10,
'n_estimators': 526, 'reg_lambda': 0.2627326168396503, 'subsample':
0.8816172855601475}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:49,926] Trial 309 finished with value: 0.008998038838993293
and parameters: {'learning_rate': 0.2654716858081393, 'max_depth': 10,
'n_estimators': 513, 'reg_lambda': 0.26223543041407843, 'subsample':
0.8815397708117936}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:51,304] Trial 310 finished with value: 0.00941782404152745
and parameters: {'learning_rate': 0.28411374472006995, 'max_depth': 10,
'n_estimators': 539, 'reg_lambda': 0.26364299574657885, 'subsample':
0.8816388288027043}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:52,991] Trial 311 finished with value: 0.008333824085150068
and parameters: {'learning_rate': 0.266383974091517, 'max_depth': 10,
'n_estimators': 527, 'reg_lambda': 0.26190148231767396, 'subsample':
0.8817495764844451}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:54,831] Trial 312 finished with value: 0.008572294652285973
and parameters: {'learning_rate': 0.2641974675032593, 'max_depth': 10,
'n_estimators': 560, 'reg_lambda': 0.26496852916074604, 'subsample':
0.8814540170759988}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:55,252] Trial 313 finished with value: 0.008491919066051392
and parameters: {'learning_rate': 0.2768411935597835, 'max_depth': 10,
'n_estimators': 514, 'reg_lambda': 0.2590059793501589, 'subsample':
0.881871154200662}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:55,657] Trial 314 finished with value: 0.009464650734405004
and parameters: {'learning_rate': 0.2652937983155522, 'max_depth': 10,
'n_estimators': 511, 'reg_lambda': 0.2631654932624049, 'subsample':
0.884815759582691}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:56,119] Trial 315 finished with value: 0.008199106346066626
and parameters: {'learning_rate': 0.2668544282005782, 'max_depth': 10,
'n_estimators': 520, 'reg_lambda': 0.26084392926897204, 'subsample':

0.8816611229890876}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:56,542] Trial 316 finished with value: 0.01040480063741951
and parameters: {'learning_rate': 0.26607715030860263, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.25719292985394887, 'subsample':
0.883900321393585}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:56,958] Trial 317 finished with value: 0.009119282591483405
and parameters: {'learning_rate': 0.2750326938683018, 'max_depth': 10,
'n_estimators': 529, 'reg_lambda': 0.26572241784619094, 'subsample':
0.8835508586189413}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:57,428] Trial 318 finished with value: 0.008050545712590531
and parameters: {'learning_rate': 0.2635952017493841, 'max_depth': 10,
'n_estimators': 536, 'reg_lambda': 0.2624374172093898, 'subsample':
0.8819661877079565}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:57,823] Trial 319 finished with value: 0.00850810434357717
and parameters: {'learning_rate': 0.27268425498787874, 'max_depth': 10,
'n_estimators': 521, 'reg_lambda': 0.2643116699963972, 'subsample':
0.8824455708407518}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:58,253] Trial 320 finished with value: 0.008788163690882119
and parameters: {'learning_rate': 0.267630217930782, 'max_depth': 10,
'n_estimators': 516, 'reg_lambda': 0.25590952187699434, 'subsample':
0.8815243625356859}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:58,634] Trial 321 finished with value: 0.010210087014514861
and parameters: {'learning_rate': 0.2742420351164859, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26698202832168166, 'subsample':
0.8818129685928426}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:59,137] Trial 322 finished with value: 0.00930928510524178
and parameters: {'learning_rate': 0.26473968830503203, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.25976537353303547, 'subsample':
0.8853594608454926}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:59,585] Trial 323 finished with value: 0.008459682044056048
and parameters: {'learning_rate': 0.2623056632127573, 'max_depth': 10,
'n_estimators': 532, 'reg_lambda': 0.2609449847552983, 'subsample':
0.8826172526647109}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:55:59,990] Trial 324 finished with value: 0.010155423759085888
and parameters: {'learning_rate': 0.2688540543091103, 'max_depth': 11,
'n_estimators': 546, 'reg_lambda': 0.23185832509070933, 'subsample':
0.882011576346326}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:00,427] Trial 325 finished with value: 0.011092786839400522
and parameters: {'learning_rate': 0.270927882159249, 'max_depth': 9,
'n_estimators': 527, 'reg_lambda': 0.2748400133604978, 'subsample':
0.882327995056205}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:00,832] Trial 326 finished with value: 0.009383892311065994
and parameters: {'learning_rate': 0.2761666950667612, 'max_depth': 10,
'n_estimators': 536, 'reg_lambda': 0.2629106220704795, 'subsample':
0.882096213847268}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:01,246] Trial 327 finished with value: 0.008288260824410585
and parameters: {'learning_rate': 0.2719916593482605, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.2660260944770254, 'subsample':

0.8825352822888053}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:01,679] Trial 328 finished with value: 0.00848423193540138
and parameters: {'learning_rate': 0.26585320879377544, 'max_depth': 10,
'n_estimators': 543, 'reg_lambda': 0.2766735789044913, 'subsample':
0.8823282394215329}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:02,077] Trial 329 finished with value: 0.009427289595889106
and parameters: {'learning_rate': 0.26712178539815606, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.26443323910854744, 'subsample':
0.881870289786492}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:02,521] Trial 330 finished with value: 0.008595264033809112
and parameters: {'learning_rate': 0.2680480113027634, 'max_depth': 10,
'n_estimators': 551, 'reg_lambda': 0.2672470622931442, 'subsample':
0.8816101446128999}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:02,924] Trial 331 finished with value: 0.008851746609225032
and parameters: {'learning_rate': 0.2732866257376096, 'max_depth': 10,
'n_estimators': 525, 'reg_lambda': 0.26135878739892093, 'subsample':
0.8826379804219611}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:03,331] Trial 332 finished with value: 0.009136525428024095
and parameters: {'learning_rate': 0.26396411217692406, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2696980914877461, 'subsample':
0.8824693132404534}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:03,792] Trial 333 finished with value: 0.008659640205060732
and parameters: {'learning_rate': 0.27080603959825694, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.2587039854565492, 'subsample':
0.8820899212675419}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:04,190] Trial 334 finished with value: 0.008455871432659072
and parameters: {'learning_rate': 0.26956242811488784, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2729864867503471, 'subsample':
0.8822790481957321}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:04,644] Trial 335 finished with value: 0.008696351922049957
and parameters: {'learning_rate': 0.266313960944676, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.2648910997372353, 'subsample':
0.8836949620878626}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:06,134] Trial 336 finished with value: 0.008761730133451195
and parameters: {'learning_rate': 0.264916174278934, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.2624389966163588, 'subsample':
0.8834202197586646}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:07,806] Trial 337 finished with value: 0.010136896762900612
and parameters: {'learning_rate': 0.2738511152173885, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2664115734805471, 'subsample':
0.8819584159669701}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:09,677] Trial 338 finished with value: 0.009437689747291476
and parameters: {'learning_rate': 0.2689054168502184, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.26817920058025374, 'subsample':
0.8817313497298076}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:10,069] Trial 339 finished with value: 0.008152095627022739
and parameters: {'learning_rate': 0.27208662297275915, 'max_depth': 10,
'n_estimators': 508, 'reg_lambda': 0.2783343080798177, 'subsample':

0.8827920108627992}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:10,467] Trial 340 finished with value: 0.008041097929288808
and parameters: {'learning_rate': 0.26687869586311797, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.26347020582184405, 'subsample':
0.8821756675097753}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:10,878] Trial 341 finished with value: 0.008486518327867464
and parameters: {'learning_rate': 0.2672294208994446, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26408873743900957, 'subsample':
0.8821713214848137}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:11,310] Trial 342 finished with value: 0.00816225121638839
and parameters: {'learning_rate': 0.2663616700171341, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2606377157155635, 'subsample':
0.8824101748284392}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:11,724] Trial 343 finished with value: 0.008206757724422978
and parameters: {'learning_rate': 0.2653590614470555, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.26298080002559204, 'subsample':
0.8820336992618298}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:12,138] Trial 344 finished with value: 0.009505090393186982
and parameters: {'learning_rate': 0.267431027376104, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2618041841556126, 'subsample':
0.8812638771100636}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:12,545] Trial 345 finished with value: 0.008583445759096585
and parameters: {'learning_rate': 0.2775666677959667, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2491655626511386, 'subsample':
0.8825524363446431}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:12,998] Trial 346 finished with value: 0.008728649300673314
and parameters: {'learning_rate': 0.26405030069665286, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26394008435576144, 'subsample':
0.8822425387401445}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:13,411] Trial 347 finished with value: 0.009604562962501723
and parameters: {'learning_rate': 0.2753432589344686, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2541511596287343, 'subsample':
0.8851515878567524}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:13,815] Trial 348 finished with value: 0.00812364737529247
and parameters: {'learning_rate': 0.2681584255490692, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2592144515933182, 'subsample':
0.8827185220587477}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:14,241] Trial 349 finished with value: 0.008507578314098825
and parameters: {'learning_rate': 0.26296246237400134, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2661430004980024, 'subsample':
0.8818083709385163}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:14,661] Trial 350 finished with value: 0.009376336937500437
and parameters: {'learning_rate': 0.2654683797468421, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2576763923463555, 'subsample':
0.8823936969451595}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:15,090] Trial 351 finished with value: 0.00894894350556917
and parameters: {'learning_rate': 0.2661658510123871, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26064552458636986, 'subsample':

0.8830053769281901}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:15,485] Trial 352 finished with value: 0.009137776495397796
and parameters: {'learning_rate': 0.26729329987556266, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2648975966425314, 'subsample':
0.8845809527401758}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:15,923] Trial 353 finished with value: 0.009570290748114028
and parameters: {'learning_rate': 0.2741828069951779, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.26161142292044265, 'subsample':
0.8819377308465729}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:16,349] Trial 354 finished with value: 0.009845808542104826
and parameters: {'learning_rate': 0.2647053960705901, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.23905608275282086, 'subsample':
0.8821731461538274}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:16,753] Trial 355 finished with value: 0.009412651335496054
and parameters: {'learning_rate': 0.26678966796847525, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2627045064048295, 'subsample':
0.8829016152186898}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:17,179] Trial 356 finished with value: 0.009205626948774165
and parameters: {'learning_rate': 0.28938829634606217, 'max_depth': 10,
'n_estimators': 515, 'reg_lambda': 0.2655036574008904, 'subsample':
0.882323297975128}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:17,607] Trial 357 finished with value: 0.008134773324015679
and parameters: {'learning_rate': 0.2729570126158738, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.2638471742377531, 'subsample':
0.8820980544248732}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:18,038] Trial 358 finished with value: 0.008351341152693774
and parameters: {'learning_rate': 0.26869523230980935, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2677545148139647, 'subsample':
0.882505024541137}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:18,473] Trial 359 finished with value: 0.008959624834328224
and parameters: {'learning_rate': 0.2680871202240165, 'max_depth': 10,
'n_estimators': 518, 'reg_lambda': 0.2594402947303095, 'subsample':
0.8816892491521752}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:18,894] Trial 360 finished with value: 0.009218778429378878
and parameters: {'learning_rate': 0.2620962277726757, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.27052243187503644, 'subsample':
0.8826953126969561}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:19,368] Trial 361 finished with value: 0.008112629079493444
and parameters: {'learning_rate': 0.2656108227446975, 'max_depth': 10,
'n_estimators': 550, 'reg_lambda': 0.26297420407961514, 'subsample':
0.8822690217611205}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:20,940] Trial 362 finished with value: 0.008629105172250193
and parameters: {'learning_rate': 0.2636990597956764, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.27510189545318786, 'subsample':
0.8813765631149928}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:22,570] Trial 363 finished with value: 0.008342528446727154
and parameters: {'learning_rate': 0.2703173552983639, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.26617357373479233, 'subsample':

0.8819463486161597}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:24,519] Trial 364 finished with value: 0.009548591268483828
and parameters: {'learning_rate': 0.2758480770405028, 'max_depth': 10,
'n_estimators': 510, 'reg_lambda': 0.27995773812977626, 'subsample':
0.8823923190559526}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:24,908] Trial 365 finished with value: 0.009277557524472515
and parameters: {'learning_rate': 0.27233692009960575, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.23486503461739064, 'subsample':
0.8826017610717862}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:25,329] Trial 366 finished with value: 0.009610703832745052
and parameters: {'learning_rate': 0.27443645376488673, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26041623790930757, 'subsample':
0.8815759807701947}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:25,743] Trial 367 finished with value: 0.008599400548288517
and parameters: {'learning_rate': 0.2645825789571709, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.2712980423748431, 'subsample':
0.8821604590842652}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:26,134] Trial 368 finished with value: 0.009427403834838033
and parameters: {'learning_rate': 0.26665106955017825, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2646521418316287, 'subsample':
0.8831578816198017}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:26,552] Trial 369 finished with value: 0.008054613010354459
and parameters: {'learning_rate': 0.26955641969889393, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.26869355518920124, 'subsample':
0.8817980373598452}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:26,953] Trial 370 finished with value: 0.010184095167310421
and parameters: {'learning_rate': 0.2713046974552064, 'max_depth': 9,
'n_estimators': 480, 'reg_lambda': 0.2768080363875754, 'subsample':
0.8820362221232082}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:27,364] Trial 371 finished with value: 0.007900319326340072
and parameters: {'learning_rate': 0.2663602740166419, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.24535880822329154, 'subsample':
0.8824783603561511}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:27,783] Trial 372 finished with value: 0.009402044862842338
and parameters: {'learning_rate': 0.26549085437783465, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2559818024988639, 'subsample':
0.8825111442046751}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:28,177] Trial 373 finished with value: 0.008119033797530036
and parameters: {'learning_rate': 0.2737529527089629, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2460413486048131, 'subsample':
0.8824754975767107}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:28,606] Trial 374 finished with value: 0.008985681097399958
and parameters: {'learning_rate': 0.26787677895588285, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2724620508803797, 'subsample':
0.8811649764118904}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:29,005] Trial 375 finished with value: 0.008479823089270795
and parameters: {'learning_rate': 0.26305916968557697, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.25075135748459965, 'subsample':

0.8843340240368465}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:29,504] Trial 376 finished with value: 0.009668836570814384
and parameters: {'learning_rate': 0.280311836836239, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.24138400336069177, 'subsample':
0.8826249864663639}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:29,887] Trial 377 finished with value: 0.0091644378626713
and parameters: {'learning_rate': 0.2661089791805798, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.25742433064001324, 'subsample':
0.8827977052952074}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:30,296] Trial 378 finished with value: 0.009457442773136676
and parameters: {'learning_rate': 0.2649895274486875, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2737544852889148, 'subsample':
0.8823720672614831}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:30,727] Trial 379 finished with value: 0.00799002727876773
and parameters: {'learning_rate': 0.2729325614761602, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2696010253653483, 'subsample':
0.8826672070581554}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:31,137] Trial 380 finished with value: 0.008983721834171914
and parameters: {'learning_rate': 0.27153969544418327, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.2698700712051706, 'subsample':
0.8828318937706156}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:31,573] Trial 381 finished with value: 0.008736745859870342
and parameters: {'learning_rate': 0.26898958656072486, 'max_depth': 10,
'n_estimators': 496, 'reg_lambda': 0.26902860130621514, 'subsample':
0.8826834722055208}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:31,972] Trial 382 finished with value: 0.00852105485483336
and parameters: {'learning_rate': 0.27243364330623315, 'max_depth': 10,
'n_estimators': 494, 'reg_lambda': 0.27088359048182925, 'subsample':
0.8824420983193236}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:32,394] Trial 383 finished with value: 0.009576106626768348
and parameters: {'learning_rate': 0.26976498046290476, 'max_depth': 10,
'n_estimators': 492, 'reg_lambda': 0.22771486693604642, 'subsample':
0.8826546487450655}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:32,803] Trial 384 finished with value: 0.00976979515355872
and parameters: {'learning_rate': 0.2997987561297839, 'max_depth': 10,
'n_estimators': 499, 'reg_lambda': 0.20549558482842728, 'subsample':
0.8840361399175364}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:33,223] Trial 385 finished with value: 0.008279441990834245
and parameters: {'learning_rate': 0.27275541738209014, 'max_depth': 10,
'n_estimators': 490, 'reg_lambda': 0.27220892110491546, 'subsample':
0.8822699501762692}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:33,713] Trial 386 finished with value: 0.008582383462329049
and parameters: {'learning_rate': 0.270650272666456, 'max_depth': 10,
'n_estimators': 532, 'reg_lambda': 0.2668886553272914, 'subsample':
0.8819051359818815}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:34,158] Trial 387 finished with value: 0.009497864744375629
and parameters: {'learning_rate': 0.26412325986004204, 'max_depth': 10,
'n_estimators': 493, 'reg_lambda': 0.2681138292902665, 'subsample':

0.8816755661409034}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:34,934] Trial 388 finished with value: 0.00863251631289037
and parameters: {'learning_rate': 0.2672806500254702, 'max_depth': 10,
'n_estimators': 498, 'reg_lambda': 0.2698261102462689, 'subsample':
0.8823367461879726}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:36,268] Trial 389 finished with value: 0.009871183632941786
and parameters: {'learning_rate': 0.2684177438485765, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.26739887064360857, 'subsample':
0.8829023293360341}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:37,942] Trial 390 finished with value: 0.007889457546832736
and parameters: {'learning_rate': 0.2661575814967044, 'max_depth': 10,
'n_estimators': 569, 'reg_lambda': 0.27388284276562497, 'subsample':
0.8825436919403103}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:39,510] Trial 391 finished with value: 0.009156188839958697
and parameters: {'learning_rate': 0.2616669051759798, 'max_depth': 10,
'n_estimators': 553, 'reg_lambda': 0.27508232475180233, 'subsample':
0.882523322196792}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:39,905] Trial 392 finished with value: 0.00864043637858195
and parameters: {'learning_rate': 0.26599210043200167, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.27641089791535417, 'subsample':
0.8822807640474893}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:40,352] Trial 393 finished with value: 0.008873676975162966
and parameters: {'learning_rate': 0.26407098741567225, 'max_depth': 10,
'n_estimators': 561, 'reg_lambda': 0.2736845344203231, 'subsample':
0.8820404196095428}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:40,757] Trial 394 finished with value: 0.009214371492080 88
and parameters: {'learning_rate': 0.265243334076587, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2440345434380336, 'subsample':
0.8824347550306045}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:41,219] Trial 395 finished with value: 0.00865222494352452
and parameters: {'learning_rate': 0.2667010318430653, 'max_depth': 10,
'n_estimators': 559, 'reg_lambda': 0.2739656530395104, 'subsample':
0.8821340408845493}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:41,620] Trial 396 finished with value: 0.009019433149065312
and parameters: {'learning_rate': 0.2732593550070583, 'max_depth': 10,
'n_estimators': 495, 'reg_lambda': 0.2721972685412636, 'subsample':
0.8815196151400572}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:42,054] Trial 397 finished with value: 0.00859576254153979
and parameters: {'learning_rate': 0.2647247712917429, 'max_depth': 10,
'n_estimators': 554, 'reg_lambda': 0.27553131720374785, 'subsample':
0.8818336555523566}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:42,463] Trial 398 finished with value: 0.009058446894591591
and parameters: {'learning_rate': 0.2630549681563843, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.25891359240420275, 'subsample':
0.8823846752696485}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:42,872] Trial 399 finished with value: 0.008702415643195776
and parameters: {'learning_rate': 0.26622837386976683, 'max_depth': 10,
'n_estimators': 557, 'reg_lambda': 0.2785526403490133, 'subsample':

0.8822200275698345}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:43,331] Trial 400 finished with value: 0.008351519500822427
and parameters: {'learning_rate': 0.27164877082852157, 'max_depth': 10,
'n_estimators': 523, 'reg_lambda': 0.27154367409407576, 'subsample':
0.8817337035642304}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:43,755] Trial 401 finished with value: 0.007876464295178244
and parameters: {'learning_rate': 0.26726813813205036, 'max_depth': 10,
'n_estimators': 567, 'reg_lambda': 0.26149250133376606, 'subsample':
0.8826042798787624}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:44,198] Trial 402 finished with value: 0.00946913154965351
and parameters: {'learning_rate': 0.2664347960833438, 'max_depth': 10,
'n_estimators': 570, 'reg_lambda': 0.27327183340131755, 'subsample':
0.8849316013231355}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:44,622] Trial 403 finished with value: 0.008480911022810858
and parameters: {'learning_rate': 0.2676279007751068, 'max_depth': 10,
'n_estimators': 566, 'reg_lambda': 0.2770645443412604, 'subsample':
0.8826000861634984}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:45,058] Trial 404 finished with value: 0.008377915953146327
and parameters: {'learning_rate': 0.2675740712407054, 'max_depth': 10,
'n_estimators': 569, 'reg_lambda': 0.2616459362366896, 'subsample':
0.8825522361118313}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:45,505] Trial 405 finished with value: 0.009578534373252368
and parameters: {'learning_rate': 0.26562061179973023, 'max_depth': 10,
'n_estimators': 564, 'reg_lambda': 0.27059582427829737, 'subsample':
0.8827178368588853}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:45,914] Trial 406 finished with value: 0.00998357330682735
and parameters: {'learning_rate': 0.27505441930617935, 'max_depth': 10,
'n_estimators': 563, 'reg_lambda': 0.2617308886916783, 'subsample':
0.8824861716335483}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:46,386] Trial 407 finished with value: 0.00838200507171595
and parameters: {'learning_rate': 0.26695964404142886, 'max_depth': 10,
'n_estimators': 538, 'reg_lambda': 0.2729700930768204, 'subsample':
0.8826079489436417}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:46,795] Trial 408 finished with value: 0.008581475955799518
and parameters: {'learning_rate': 0.26830444467972864, 'max_depth': 10,
'n_estimators': 566, 'reg_lambda': 0.2440407471760915, 'subsample':
0.8823925242512565}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:47,218] Trial 409 finished with value: 0.009048050167303668
and parameters: {'learning_rate': 0.2734072896366011, 'max_depth': 10,
'n_estimators': 568, 'reg_lambda': 0.22304026213426117, 'subsample':
0.882698138646109}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:47,632] Trial 410 finished with value: 0.009111228452502203
and parameters: {'learning_rate': 0.2702163953802988, 'max_depth': 10,
'n_estimators': 565, 'reg_lambda': 0.2745085307552332, 'subsample':
0.8824769068286666}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:48,053] Trial 411 finished with value: 0.009882521957306163
and parameters: {'learning_rate': 0.2655579938837778, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.26928421832217686, 'subsample':

0.8857582256971822}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:48,511] Trial 412 finished with value: 0.008967939005534284
and parameters: {'learning_rate': 0.2690904839479799, 'max_depth': 10,
'n_estimators': 568, 'reg_lambda': 0.27105009408857555, 'subsample':
0.88305261507224}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:48,939] Trial 413 finished with value: 0.011684525756703564
and parameters: {'learning_rate': 0.2666952053832479, 'max_depth': 11,
'n_estimators': 567, 'reg_lambda': 0.2662856657182116, 'subsample':
0.8823156166780204}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:49,500] Trial 414 finished with value: 0.008950060285879228
and parameters: {'learning_rate': 0.2720849892905145, 'max_depth': 10,
'n_estimators': 497, 'reg_lambda': 0.26496995507368487, 'subsample':
0.8828265392803248}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:51,026] Trial 415 finished with value: 0.009244280188409199
and parameters: {'learning_rate': 0.26748470794099033, 'max_depth': 10,
'n_estimators': 520, 'reg_lambda': 0.2607218116206084, 'subsample':
0.8819393627577875}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:52,842] Trial 416 finished with value: 0.007730956066794298
and parameters: {'learning_rate': 0.2657663989926227, 'max_depth': 10,
'n_estimators': 525, 'reg_lambda': 0.2624756419129931, 'subsample':
0.8825538611126068}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:54,590] Trial 417 finished with value: 0.008779087419145421
and parameters: {'learning_rate': 0.2707180936464671, 'max_depth': 10,
'n_estimators': 530, 'reg_lambda': 0.26241233950096177, 'subsample':
0.8825895979134235}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:55,016] Trial 418 finished with value: 0.008719260076536242
and parameters: {'learning_rate': 0.2650082300238944, 'max_depth': 10,
'n_estimators': 534, 'reg_lambda': 0.2601946198474336, 'subsample':
0.8827519903975846}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:55,437] Trial 419 finished with value: 0.010045457077053276
and parameters: {'learning_rate': 0.2747989775452657, 'max_depth': 10,
'n_estimators': 525, 'reg_lambda': 0.26312938932235835, 'subsample':
0.8815910400700502}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:55,873] Trial 420 finished with value: 0.008450302240586195
and parameters: {'learning_rate': 0.2665227301420436, 'max_depth': 10,
'n_estimators': 542, 'reg_lambda': 0.25849602241249614, 'subsample':
0.8825198999226566}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:56,296] Trial 421 finished with value: 0.008221649726116212
and parameters: {'learning_rate': 0.26785170451401474, 'max_depth': 10,
'n_estimators': 570, 'reg_lambda': 0.2610670618125419, 'subsample':
0.8817681694854059}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:56,749] Trial 422 finished with value: 0.009278416375117136
and parameters: {'learning_rate': 0.2730808013028917, 'max_depth': 10,
'n_estimators': 514, 'reg_lambda': 0.2623466430560968, 'subsample':
0.8826289858564417}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:57,206] Trial 423 finished with value: 0.00951938227034215
and parameters: {'learning_rate': 0.26917339121651473, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.2483734718456456, 'subsample':

0.8820477417551593}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:57,619] Trial 424 finished with value: 0.009957280572560215
and parameters: {'learning_rate': 0.2660669705713197, 'max_depth': 10,
'n_estimators': 517, 'reg_lambda': 0.26404537926784344, 'subsample':
0.881393264700125}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:58,060] Trial 425 finished with value: 0.008346785867475968
and parameters: {'learning_rate': 0.2761461057010931, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.2782359912323378, 'subsample':
0.8823521538826379}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:58,484] Trial 426 finished with value: 0.009015156085489081
and parameters: {'learning_rate': 0.27123617750061396, 'max_depth': 10,
'n_estimators': 511, 'reg_lambda': 0.2522373403992537, 'subsample':
0.8829293294367702}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:58,907] Trial 427 finished with value: 0.008644809306926304
and parameters: {'learning_rate': 0.2649659019035821, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.27557846145176723, 'subsample':
0.8824648067730395}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:59,312] Trial 428 finished with value: 0.008204202384408298
and parameters: {'learning_rate': 0.27392199996655675, 'max_depth': 10,
'n_estimators': 522, 'reg_lambda': 0.25993920525331166, 'subsample':
0.8827077057841272}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:56:59,768] Trial 429 finished with value: 0.008898899858414687
and parameters: {'learning_rate': 0.2672750228044558, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2644096152266127, 'subsample':
0.8818971274119233}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:00,179] Trial 430 finished with value: 0.008811810755182111
and parameters: {'learning_rate': 0.26847429648801124, 'max_depth': 10,
'n_estimators': 519, 'reg_lambda': 0.26240863968775213, 'subsample':
0.8822357760187647}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:00,628] Trial 431 finished with value: 0.00890723036902942
and parameters: {'learning_rate': 0.27267482244884383, 'max_depth': 10,
'n_estimators': 547, 'reg_lambda': 0.2575351785122653, 'subsample':
0.882072352385186}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:01,115] Trial 432 finished with value: 0.008259046772835435
and parameters: {'learning_rate': 0.26429705407799997, 'max_depth': 10,
'n_estimators': 544, 'reg_lambda': 0.26536596109169064, 'subsample':
0.8825682277646036}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:01,561] Trial 433 finished with value: 0.00878000446464362
and parameters: {'learning_rate': 0.26958800763958113, 'max_depth': 10,
'n_estimators': 548, 'reg_lambda': 0.25520736837406865, 'subsample':
0.8823308436283666}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:02,034] Trial 434 finished with value: 0.009038634134743042
and parameters: {'learning_rate': 0.26607257174689414, 'max_depth': 10,
'n_estimators': 528, 'reg_lambda': 0.2723504690927593, 'subsample':
0.883375532670107}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:02,461] Trial 435 finished with value: 0.008559853763679865
and parameters: {'learning_rate': 0.27180773714660467, 'max_depth': 10,
'n_estimators': 513, 'reg_lambda': 0.261867220152867, 'subsample':

0.8827980394972665}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:02,917] Trial 436 finished with value: 0.009004566724567448
and parameters: {'learning_rate': 0.26791276138656706, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.26027504699892445, 'subsample':
0.8816416330987192}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:03,341] Trial 437 finished with value: 0.008624560180605655
and parameters: {'learning_rate': 0.2705489572026236, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2743372164151711, 'subsample':
0.8824920824757854}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:03,794] Trial 438 finished with value: 0.008028721445247251
and parameters: {'learning_rate': 0.26549639660505725, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.26323285875532126, 'subsample':
0.881803046521062}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:04,241] Trial 439 finished with value: 0.008185333906288195
and parameters: {'learning_rate': 0.2669076351653996, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.27710380198529466, 'subsample':
0.8821584022070121}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:05,347] Trial 440 finished with value: 0.009262026620578909
and parameters: {'learning_rate': 0.2740023744706143, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.2663094577824752, 'subsample':
0.8819935173772006}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:07,308] Trial 441 finished with value: 0.009963183984941911
and parameters: {'learning_rate': 0.26474242512555796, 'max_depth': 10,
'n_estimators': 570, 'reg_lambda': 0.26909824024824536, 'subsample':
0.8847677854917542}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:08,809] Trial 442 finished with value: 0.009477141652155494
and parameters: {'learning_rate': 0.2751288273049401, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2707988557006358, 'subsample':
0.8822866926040824}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:09,343] Trial 443 finished with value: 0.008255748056002541
and parameters: {'learning_rate': 0.2681582186676221, 'max_depth': 10,
'n_estimators': 491, 'reg_lambda': 0.26449011962231767, 'subsample':
0.8824202167241842}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:09,768] Trial 444 finished with value: 0.007623638007462818
and parameters: {'learning_rate': 0.26610712130929093, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.2610158948720976, 'subsample':
0.8826570109158505}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:10,193] Trial 445 finished with value: 0.008595635727018734
and parameters: {'learning_rate': 0.26611187661738595, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.2589777662855558, 'subsample':
0.8821128152627188}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:10,599] Trial 446 finished with value: 0.009190315662073584
and parameters: {'learning_rate': 0.26389088970451546, 'max_depth': 10,
'n_estimators': 509, 'reg_lambda': 0.26135796238461345, 'subsample':
0.8825763299850194}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:11,030] Trial 447 finished with value: 0.008826215251768134
and parameters: {'learning_rate': 0.2668187457704498, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.2570563235292868, 'subsample':

0.8814733493871014}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:11,473] Trial 448 finished with value: 0.009577653329644591
and parameters: {'learning_rate': 0.26543708968516466, 'max_depth': 10,
'n_estimators': 516, 'reg_lambda': 0.25990705854236795, 'subsample':
0.8818972700218428}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:11,870] Trial 449 finished with value: 0.008909057698986929
and parameters: {'learning_rate': 0.2667130706802726, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.2619860198387923, 'subsample':
0.8822732318085387}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:12,347] Trial 450 finished with value: 0.008876162104484237
and parameters: {'learning_rate': 0.2686375767903961, 'max_depth': 10,
'n_estimators': 512, 'reg_lambda': 0.25827307225393953, 'subsample':
0.8832390743056329}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:12,796] Trial 451 finished with value: 0.008056033570811494
and parameters: {'learning_rate': 0.2648327608482316, 'max_depth': 10,
'n_estimators': 508, 'reg_lambda': 0.2637785587980733, 'subsample':
0.8824155018351294}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:13,253] Trial 452 finished with value: 0.008419967627073527
and parameters: {'learning_rate': 0.26735609975845037, 'max_depth': 10,
'n_estimators': 506, 'reg_lambda': 0.26040462425090827, 'subsample':
0.8821966276750255}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:13,737] Trial 453 finished with value: 0.008617130574916998
and parameters: {'learning_rate': 0.26598291168846155, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.26252023964791843, 'subsample':
0.8816912995817539}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:14,173] Trial 454 finished with value: 0.008602514151811022
and parameters: {'learning_rate': 0.2638078657740583, 'max_depth': 10,
'n_estimators': 526, 'reg_lambda': 0.26521179477786155, 'subsample':
0.882848375291051}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:14,620] Trial 455 finished with value: 0.008104215691941629
and parameters: {'learning_rate': 0.26776972831454343, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2612660862118348, 'subsample':
0.8826700060315454}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:15,073] Trial 456 finished with value: 0.009933892801036116
and parameters: {'learning_rate': 0.26934738029856614, 'max_depth': 10,
'n_estimators': 502, 'reg_lambda': 0.27933417619807166, 'subsample':
0.8820103648497115}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:15,537] Trial 457 finished with value: 0.009608868573940563
and parameters: {'learning_rate': 0.2657737698587026, 'max_depth': 10,
'n_estimators': 530, 'reg_lambda': 0.2630074559459843, 'subsample':
0.8842171229463514}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:15,985] Trial 458 finished with value: 0.009125678380035484
and parameters: {'learning_rate': 0.26682023347905304, 'max_depth': 10,
'n_estimators': 504, 'reg_lambda': 0.26417930010277435, 'subsample':
0.882490821175851}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:16,466] Trial 459 finished with value: 0.008837840474269014
and parameters: {'learning_rate': 0.26991521807887553, 'max_depth': 10,
'n_estimators': 508, 'reg_lambda': 0.25953599878511346, 'subsample':

0.8823241819995983}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:16,890] Trial 460 finished with value: 0.009219187215814856
and parameters: {'learning_rate': 0.2645890084189481, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.26169455709394107, 'subsample':
0.8825747395031971}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:17,307] Trial 461 finished with value: 0.00940966281823805
and parameters: {'learning_rate': 0.2678677670684601, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.21386973420921027, 'subsample':
0.881794068139708}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:17,760] Trial 462 finished with value: 0.010517437464040873
and parameters: {'learning_rate': 0.2656015541014536, 'max_depth': 11,
'n_estimators': 567, 'reg_lambda': 0.2659952931238218, 'subsample':
0.8838118856655918}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:18,172] Trial 463 finished with value: 0.008057106505064636
and parameters: {'learning_rate': 0.26916743316352504, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.27531534109116046, 'subsample':
0.8820863173947942}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:18,620] Trial 464 finished with value: 0.008717368904129063
and parameters: {'learning_rate': 0.2669162925829689, 'max_depth': 10,
'n_estimators': 536, 'reg_lambda': 0.25818282154641714, 'subsample':
0.8823882417684522}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:19,147] Trial 465 finished with value: 0.008925673894153318
and parameters: {'learning_rate': 0.2636183998143179, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.2672908474555158, 'subsample':
0.8821954668223023}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:20,517] Trial 466 finished with value: 0.008807989678128236
and parameters: {'learning_rate': 0.26613864055335834, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2633568463232055, 'subsample':
0.881928959927598}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:22,468] Trial 467 finished with value: 0.008465708029450281
and parameters: {'learning_rate': 0.26873572525561373, 'max_depth': 10,
'n_estimators': 501, 'reg_lambda': 0.2723614577198535, 'subsample':
0.8826786226744837}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:24,275] Trial 468 finished with value: 0.007963762704874278
and parameters: {'learning_rate': 0.2648634145196623, 'max_depth': 10,
'n_estimators': 541, 'reg_lambda': 0.2609919739587478, 'subsample':
0.8824831734832717}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:24,722] Trial 469 finished with value: 0.009487121396975409
and parameters: {'learning_rate': 0.2625441469928227, 'max_depth': 10,
'n_estimators': 541, 'reg_lambda': 0.2600327214624899, 'subsample':
0.8815905046792075}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:25,225] Trial 470 finished with value: 0.008734223573913735
and parameters: {'learning_rate': 0.2644878850962181, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.25751804448223364, 'subsample':
0.8822710074669755}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:25,677] Trial 471 finished with value: 0.008534383108559971
and parameters: {'learning_rate': 0.26347666490282046, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.27679215298365123, 'subsample':

0.8824360174952289}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:26,183] Trial 472 finished with value: 0.008661964061489724
and parameters: {'learning_rate': 0.2641562436065564, 'max_depth': 10,
'n_estimators': 510, 'reg_lambda': 0.2601716196360377, 'subsample':
0.8821487168269956}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:26,631] Trial 473 finished with value: 0.009016094109201378
and parameters: {'learning_rate': 0.2649746038755287, 'max_depth': 10,
'n_estimators': 557, 'reg_lambda': 0.2740223487243072, 'subsample':
0.8823999450282227}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:27,108] Trial 474 finished with value: 0.009170460163650432
and parameters: {'learning_rate': 0.265297070293576, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.2193537026458251, 'subsample':
0.8824999836660317}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:27,541] Trial 475 finished with value: 0.008723855733844913
and parameters: {'learning_rate': 0.27106224631874837, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.25370361450315343, 'subsample':
0.8819954458328714}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:27,989] Trial 476 finished with value: 0.008785746536936645
and parameters: {'learning_rate': 0.27210437826470446, 'max_depth': 10,
'n_estimators': 507, 'reg_lambda': 0.2612725830735715, 'subsample':
0.8823187467554032}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:28,421] Trial 477 finished with value: 0.00938497437793484
and parameters: {'learning_rate': 0.2770917098571142, 'max_depth': 10,
'n_estimators': 549, 'reg_lambda': 0.2588455169326646, 'subsample':
0.8829932232377213}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:28,843] Trial 478 finished with value: 0.010065655674290708
and parameters: {'learning_rate': 0.27011260158077505, 'max_depth': 9,
'n_estimators': 487, 'reg_lambda': 0.26472760063217987, 'subsample':
0.8835136385666145}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:29,307] Trial 479 finished with value: 0.008593563524819707
and parameters: {'learning_rate': 0.2659225924193959, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.26815911923000546, 'subsample':
0.8810490315207339}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:29,811] Trial 480 finished with value: 0.009084650986491862
and parameters: {'learning_rate': 0.2651279459185078, 'max_depth': 10,
'n_estimators': 503, 'reg_lambda': 0.2716789809601993, 'subsample':
0.8818413905435446}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:30,266] Trial 481 finished with value: 0.009566476900019645
and parameters: {'learning_rate': 0.27464288279863386, 'max_depth': 10,
'n_estimators': 563, 'reg_lambda': 0.25604243461104936, 'subsample':
0.8827709126550548}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:30,688] Trial 482 finished with value: 0.009936645821193326
and parameters: {'learning_rate': 0.2786203083562548, 'max_depth': 10,
'n_estimators': 481, 'reg_lambda': 0.2631171906126207, 'subsample':
0.8850405290785143}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:31,160] Trial 483 finished with value: 0.008585036605649495
and parameters: {'learning_rate': 0.26314403408599973, 'max_depth': 10,
'n_estimators': 568, 'reg_lambda': 0.2657128928892414, 'subsample':

0.8816917303738857}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:31,576] Trial 484 finished with value: 0.008817683302179996
and parameters: {'learning_rate': 0.26746006663657423, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.2394409262973086, 'subsample':
0.8822104840882734}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:32,024] Trial 485 finished with value: 0.00967949679651145
and parameters: {'learning_rate': 0.26619648928095374, 'max_depth': 10,
'n_estimators': 484, 'reg_lambda': 0.23072988368305286, 'subsample':
0.8820773790009154}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:32,478] Trial 486 finished with value: 0.009214976413865884
and parameters: {'learning_rate': 0.2733835844457556, 'max_depth': 10,
'n_estimators': 523, 'reg_lambda': 0.2781356283230059, 'subsample':
0.8825191807638502}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:32,909] Trial 487 finished with value: 0.009869415654815108
and parameters: {'learning_rate': 0.2760698373737104, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.26102893609915395, 'subsample':
0.8854835459181393}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:33,393] Trial 488 finished with value: 0.009602806788849698
and parameters: {'learning_rate': 0.2684101177412614, 'max_depth': 10,
'n_estimators': 505, 'reg_lambda': 0.27991551331547, 'subsample':
0.884625810298346}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:33,921] Trial 489 finished with value: 0.009365072446826533
and parameters: {'learning_rate': 0.2644754296983043, 'max_depth': 10,
'n_estimators': 482, 'reg_lambda': 0.26720118065411974, 'subsample':
0.8823448787488843}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:35,576] Trial 490 finished with value: 0.008984496766690898
and parameters: {'learning_rate': 0.27073166175479474, 'max_depth': 10,
'n_estimators': 480, 'reg_lambda': 0.26383640806051756, 'subsample':
0.8826239182096675}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:37,540] Trial 491 finished with value: 0.008344782022253501
and parameters: {'learning_rate': 0.2719776837464487, 'max_depth': 10,
'n_estimators': 483, 'reg_lambda': 0.2731450059686787, 'subsample':
0.8814946417175871}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:39,267] Trial 492 finished with value: 0.008012325125457046
and parameters: {'learning_rate': 0.2671668261532799, 'max_depth': 10,
'n_estimators': 500, 'reg_lambda': 0.2589652109850644, 'subsample':
0.8822316846925731}. Best is trial 187 with value: 0.007533649802326404.
[I 2024-08-30 19:57:39,709] Trial 493 finished with value: 0.007474479047145543
and parameters: {'learning_rate': 0.265413054277624, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26174255224916076, 'subsample':
0.8819366505533812}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:40,140] Trial 494 finished with value: 0.00924390207839815
and parameters: {'learning_rate': 0.2637885688360357, 'max_depth': 10,
'n_estimators': 488, 'reg_lambda': 0.2505580711229951, 'subsample':
0.882018056307597}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:40,589] Trial 495 finished with value: 0.00927025246400738
and parameters: {'learning_rate': 0.2617802723553355, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2614755498189149, 'subsample':

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0.8821022070049217}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:41,032] Trial 496 finished with value: 0.008065992508450045
and parameters: {'learning_rate': 0.26511201044171306, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.2621006335698043, 'subsample':
0.8823999240484973}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:41,471] Trial 497 finished with value: 0.009684308209400985
and parameters: {'learning_rate': 0.2658464490493825, 'max_depth': 10,
'n_estimators': 487, 'reg_lambda': 0.2606484955181821, 'subsample':
0.8819753066123457}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:41,920] Trial 498 finished with value: 0.008357560485198265
and parameters: {'learning_rate': 0.26460906058630196, 'max_depth': 10,
'n_estimators': 485, 'reg_lambda': 0.2628156974840101, 'subsample':
0.8822537544117511}. Best is trial 493 with value: 0.007474479047145543.
[I 2024-08-30 19:57:42,341] Trial 499 finished with value: 0.0079568940774097
and parameters: {'learning_rate': 0.2664687148295687, 'max_depth': 10,
'n_estimators': 489, 'reg_lambda': 0.25856599432907773, 'subsample':
0.8825156025659358}. Best is trial 493 with value: 0.007474479047145543.

            i=4: {'learning_rate': 0.265413054277624, 'max_depth': 10,
'n_estimators': 486, 'reg_lambda': 0.26174255224916076, 'subsample':
0.8819366505533812}
    MSE    i=4: 0.007474479047145543
[9284. 9035. 9152.] [8405.25418091 8108.26398468 8756.5245285 ] [0.09 0.1  0.04]
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[I 2024-08-30 19:57:42,871] A new study created in memory with name: no-
name-d399b80f-734e-4db4-b71f-006845ebb22d
[I 2024-08-30 19:57:43,303] Trial 0 finished with value: 0.010197269192043768
and parameters: {'learning_rate': 0.3030681993606883, 'max_depth': 10,
'n_estimators': 644, 'reg_lambda': 0.204495851036379, 'subsample':
0.884486424233458}. Best is trial 0 with value: 0.010197269192043768.
[I 2024-08-30 19:57:43,729] Trial 1 finished with value: 0.009919755129661211
and parameters: {'learning_rate': 0.27435585835068876, 'max_depth': 10,
'n_estimators': 689, 'reg_lambda': 0.2044846498809773, 'subsample':
0.8828029056987666}. Best is trial 1 with value: 0.009919755129661211.
[I 2024-08-30 19:57:44,115] Trial 2 finished with value: 0.009265519546847229
and parameters: {'learning_rate': 0.30060433083417837, 'max_depth': 10,
'n_estimators': 656, 'reg_lambda': 0.25215300856643397, 'subsample':
0.8826322760118879}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:44,467] Trial 3 finished with value: 0.009941905876065365
and parameters: {'learning_rate': 0.3149327052877867, 'max_depth': 11,
'n_estimators': 633, 'reg_lambda': 0.27929636107175604, 'subsample':
0.8858548757809298}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:44,877] Trial 4 finished with value: 0.010085210866329854
and parameters: {'learning_rate': 0.2840435687607859, 'max_depth': 11,
'n_estimators': 634, 'reg_lambda': 0.21803450412385325, 'subsample':
0.8808387149519749}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:45,300] Trial 5 finished with value: 0.009730762838032618
and parameters: {'learning_rate': 0.2633792541943571, 'max_depth': 10,
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'n_estimators': 661, 'reg_lambda': 0.20781695216051282, 'subsample':
0.8839959072090257}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:45,691] Trial 6 finished with value: 0.010054122659238262
and parameters: {'learning_rate': 0.2997679025060004, 'max_depth': 9,
'n_estimators': 646, 'reg_lambda': 0.20087042204175426, 'subsample':
0.8826883060313203}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:46,144] Trial 7 finished with value: 0.009768227620952663
and parameters: {'learning_rate': 0.2662312705432022, 'max_depth': 9,
'n_estimators': 699, 'reg_lambda': 0.21603494234779022, 'subsample':
0.8820325500072913}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:46,505] Trial 8 finished with value: 0.009566679789507327
and parameters: {'learning_rate': 0.3114402973973064, 'max_depth': 9,
'n_estimators': 657, 'reg_lambda': 0.2044237256007509, 'subsample':
0.885391440917143}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:46,918] Trial 9 finished with value: 0.009565496522254049
and parameters: {'learning_rate': 0.2999083162909235, 'max_depth': 9,
'n_estimators': 658, 'reg_lambda': 0.23578911213501796, 'subsample':
0.8808671461852627}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:47,355] Trial 10 finished with value: 0.011089869574032242
and parameters: {'learning_rate': 0.2865141980966198, 'max_depth': 11,
'n_estimators': 677, 'reg_lambda': 0.2656759392518115, 'subsample':
0.8800141420591838}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:47,768] Trial 11 finished with value: 0.009646419009727233
and parameters: {'learning_rate': 0.2984873939918505, 'max_depth': 9,
'n_estimators': 673, 'reg_lambda': 0.24328541915200427, 'subsample':
0.8816417828810261}. Best is trial 2 with value: 0.009265519546847229.
[I 2024-08-30 19:57:48,206] Trial 12 finished with value: 0.008132588457769187
and parameters: {'learning_rate': 0.2936586264206211, 'max_depth': 10,
'n_estimators': 651, 'reg_lambda': 0.24224228641426787, 'subsample':
0.8809601928254386}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:48,633] Trial 13 finished with value: 0.009842629222984196
and parameters: {'learning_rate': 0.29303753657799425, 'max_depth': 10,
'n_estimators': 644, 'reg_lambda': 0.24757163123583978, 'subsample':
0.883827496381177}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:49,136] Trial 14 finished with value: 0.009186953945262461
and parameters: {'learning_rate': 0.2791900434734509, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.2567117482025423, 'subsample':
0.8818433131363319}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:50,559] Trial 15 finished with value: 0.009672095836928159
and parameters: {'learning_rate': 0.27778537562627803, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.259542324852644, 'subsample':
0.8815005680107548}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:52,499] Trial 16 finished with value: 0.010094816909009548
and parameters: {'learning_rate': 0.2772824017059983, 'max_depth': 11,
'n_estimators': 684, 'reg_lambda': 0.23233727918005567, 'subsample':
0.8800072969471251}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:54,315] Trial 17 finished with value: 0.009622200441777027
and parameters: {'learning_rate': 0.2901572875537577, 'max_depth': 10,

'n_estimators': 650, 'reg_lambda': 0.2718684547879756, 'subsample':
0.8809146153856708}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:54,734] Trial 18 finished with value: 0.010000982652031372
and parameters: {'learning_rate': 0.2706161589639579, 'max_depth': 11,
'n_estimators': 667, 'reg_lambda': 0.22584908022456504, 'subsample':
0.8820367088055893}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:55,137] Trial 19 finished with value: 0.009781933349334465
and parameters: {'learning_rate': 0.28267810528132437, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2544422887679258, 'subsample':
0.8813272296934589}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:55,561] Trial 20 finished with value: 0.009854759445379677
and parameters: {'learning_rate': 0.2924424578154889, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2624769006917385, 'subsample':
0.8836574595366256}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:55,937] Trial 21 finished with value: 0.010616661294401017
and parameters: {'learning_rate': 0.3050471879744422, 'max_depth': 10,
'n_estimators': 652, 'reg_lambda': 0.2528047777864294, 'subsample':
0.8823409244860551}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:56,367] Trial 22 finished with value: 0.009311026085591381
and parameters: {'learning_rate': 0.3197121886035355, 'max_depth': 10,
'n_estimators': 639, 'reg_lambda': 0.24538567737194775, 'subsample':
0.8833559607859983}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:56,750] Trial 23 finished with value: 0.009514658882149507
and parameters: {'learning_rate': 0.3087457306381637, 'max_depth': 10,
'n_estimators': 653, 'reg_lambda': 0.25204354355185055, 'subsample':
0.8831258851197951}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:57,164] Trial 24 finished with value: 0.009429451129916914
and parameters: {'learning_rate': 0.29588065780702677, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.23747392744216023, 'subsample':
0.8805139384562383}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:57,611] Trial 25 finished with value: 0.010789021889279273
and parameters: {'learning_rate': 0.28672290543133827, 'max_depth': 11,
'n_estimators': 661, 'reg_lambda': 0.26944007389411995, 'subsample':
0.8823688790068605}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:58,033] Trial 26 finished with value: 0.009812353931616698
and parameters: {'learning_rate': 0.27922447760615027, 'max_depth': 9,
'n_estimators': 671, 'reg_lambda': 0.22919626145483946, 'subsample':
0.8816247670929432}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:58,463] Trial 27 finished with value: 0.010594092005542486
and parameters: {'learning_rate': 0.30568744123572783, 'max_depth': 10,
'n_estimators': 655, 'reg_lambda': 0.25776830149962376, 'subsample':
0.882111753363607}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:58,855] Trial 28 finished with value: 0.008759004066658022
and parameters: {'learning_rate': 0.295537751971979, 'max_depth': 10,
'n_estimators': 649, 'reg_lambda': 0.24194239269787837, 'subsample':
0.8811645185137181}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:59,270] Trial 29 finished with value: 0.010032922703396287
and parameters: {'learning_rate': 0.29542767817851995, 'max_depth': 11,

'n_estimators': 648, 'reg_lambda': 0.24181161184336386, 'subsample':
0.8812611269452565}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:57:59,721] Trial 30 finished with value: 0.010913457890184974
and parameters: {'learning_rate': 0.2720036438138996, 'max_depth': 9,
'n_estimators': 637, 'reg_lambda': 0.22299355863089929, 'subsample':
0.8804811260352978}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:00,162] Trial 31 finished with value: 0.010868866449819324
and parameters: {'learning_rate': 0.3017593598844163, 'max_depth': 10,
'n_estimators': 641, 'reg_lambda': 0.24920330053263604, 'subsample':
0.8818011030055335}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:00,606] Trial 32 finished with value: 0.00953452001644979
and parameters: {'learning_rate': 0.2886319722700625, 'max_depth': 10,
'n_estimators': 659, 'reg_lambda': 0.23954147219075486, 'subsample':
0.8827015246366916}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:01,028] Trial 33 finished with value: 0.011118551493034671
and parameters: {'learning_rate': 0.295110446615343, 'max_depth': 10,
'n_estimators': 649, 'reg_lambda': 0.2568707893163621, 'subsample':
0.8812179410237513}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:01,469] Trial 34 finished with value: 0.009575377405809587
and parameters: {'learning_rate': 0.28314752985328107, 'max_depth': 10,
'n_estimators': 644, 'reg_lambda': 0.24802653929259189, 'subsample':
0.8844090423798233}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:01,868] Trial 35 finished with value: 0.009999221384834275
and parameters: {'learning_rate': 0.30354982120619894, 'max_depth': 10,
'n_estimators': 654, 'reg_lambda': 0.23543869847782964, 'subsample':
0.8824690070242298}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:02,302] Trial 36 finished with value: 0.009753068683922813
and parameters: {'learning_rate': 0.2900508008424521, 'max_depth': 10,
'n_estimators': 663, 'reg_lambda': 0.2627612912775702, 'subsample':
0.8804824219211242}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:02,735] Trial 37 finished with value: 0.009494178194291783
and parameters: {'learning_rate': 0.3099166982337623, 'max_depth': 10,
'n_estimators': 635, 'reg_lambda': 0.2787604419563679, 'subsample':
0.8830779007509929}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:03,177] Trial 38 finished with value: 0.008987683994908057
and parameters: {'learning_rate': 0.26067357142499425, 'max_depth': 10,
'n_estimators': 630, 'reg_lambda': 0.24201040640903757, 'subsample':
0.8811130282635559}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:03,690] Trial 39 finished with value: 0.00962228073571444
and parameters: {'learning_rate': 0.26288680266228864, 'max_depth': 10,
'n_estimators': 640, 'reg_lambda': 0.23001338472742144, 'subsample':
0.8811452989973351}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:04,822] Trial 40 finished with value: 0.010304839901637868
and parameters: {'learning_rate': 0.26622996639569624, 'max_depth': 11,
'n_estimators': 630, 'reg_lambda': 0.2423330822921285, 'subsample':
0.8807080338762697}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:06,820] Trial 41 finished with value: 0.009299842522877468
and parameters: {'learning_rate': 0.29857634770823493, 'max_depth': 10,

'n_estimators': 631, 'reg_lambda': 0.2516042084657089, 'subsample':
0.8819201868080508}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:07,940] Trial 42 finished with value: 0.008392163190764221
and parameters: {'learning_rate': 0.2680144775168444, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.2447090334872619, 'subsample':
0.8811179572376993}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:08,875] Trial 43 finished with value: 0.008827385220839616
and parameters: {'learning_rate': 0.2613256413143347, 'max_depth': 10,
'n_estimators': 692, 'reg_lambda': 0.24513917691531525, 'subsample':
0.8809964805540124}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:09,332] Trial 44 finished with value: 0.009325187610101407
and parameters: {'learning_rate': 0.2601407228851583, 'max_depth': 10,
'n_estimators': 697, 'reg_lambda': 0.24516866253644212, 'subsample':
0.8803150487472575}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:09,755] Trial 45 finished with value: 0.010604598966782874
and parameters: {'learning_rate': 0.26766870220020195, 'max_depth': 9,
'n_estimators': 697, 'reg_lambda': 0.2386605485058288, 'subsample':
0.8810037494249545}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:10,215] Trial 46 finished with value: 0.008802415828048376
and parameters: {'learning_rate': 0.26138656118627074, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.23245219655042884, 'subsample':
0.8807329566026967}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:10,636] Trial 47 finished with value: 0.008699741999553678
and parameters: {'learning_rate': 0.26438200745417095, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.2328334089384937, 'subsample':
0.8803052609723133}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:11,100] Trial 48 finished with value: 0.010019583731028181
and parameters: {'learning_rate': 0.26494950572997455, 'max_depth': 10,
'n_estimators': 689, 'reg_lambda': 0.2162310532811021, 'subsample':
0.8802609278742202}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:11,528] Trial 49 finished with value: 0.009105927570783778
and parameters: {'learning_rate': 0.26957727229310297, 'max_depth': 10,
'n_estimators': 690, 'reg_lambda': 0.22240802540858642, 'subsample':
0.8807276990256284}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:11,963] Trial 50 finished with value: 0.009927008200534602
and parameters: {'learning_rate': 0.2745447167488825, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.21092226908486292, 'subsample':
0.8855115324731547}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:12,413] Trial 51 finished with value: 0.009478418928950882
and parameters: {'learning_rate': 0.2628071961332715, 'max_depth': 10,
'n_estimators': 694, 'reg_lambda': 0.23407654945197165, 'subsample':
0.8814875514546708}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:12,836] Trial 52 finished with value: 0.009068421755011677
and parameters: {'learning_rate': 0.2681160316414059, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.22888888568915336, 'subsample':
0.8802430102961077}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:13,292] Trial 53 finished with value: 0.009595126240054768
and parameters: {'learning_rate': 0.265023356397222, 'max_depth': 10,

'n_estimators': 686, 'reg_lambda': 0.23307417882886072, 'subsample':
0.8807765282452906}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:13,722] Trial 54 finished with value: 0.00956451985448885
and parameters: {'learning_rate': 0.27353920112250885, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.23629984932189485, 'subsample':
0.8806045669335275}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:14,217] Trial 55 finished with value: 0.009355602188930456
and parameters: {'learning_rate': 0.26171216131919006, 'max_depth': 10,
'n_estimators': 693, 'reg_lambda': 0.24548687045176884, 'subsample':
0.8809464650337421}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:14,707] Trial 56 finished with value: 0.009369479209455934
and parameters: {'learning_rate': 0.2652564576170725, 'max_depth': 10,
'n_estimators': 687, 'reg_lambda': 0.24007686045616697, 'subsample':
0.8813781110475044}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:15,185] Trial 57 finished with value: 0.009414498897318425
and parameters: {'learning_rate': 0.2693180356309583, 'max_depth': 10,
'n_estimators': 700, 'reg_lambda': 0.22564811136171264, 'subsample':
0.8800247144805217}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:15,621] Trial 58 finished with value: 0.010369175909563391
and parameters: {'learning_rate': 0.29308750835500397, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2320476908974353, 'subsample':
0.8817170901045273}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:16,099] Trial 59 finished with value: 0.009517684851423165
and parameters: {'learning_rate': 0.2638071765375242, 'max_depth': 10,
'n_estimators': 694, 'reg_lambda': 0.2505114947698066, 'subsample':
0.8802807818736341}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:16,538] Trial 60 finished with value: 0.009453733476353653
and parameters: {'learning_rate': 0.28547839340743997, 'max_depth': 9,
'n_estimators': 697, 'reg_lambda': 0.24485120890358938, 'subsample':
0.8808047912137559}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:16,975] Trial 61 finished with value: 0.009719590810380376
and parameters: {'learning_rate': 0.2601313961545586, 'max_depth': 10,
'n_estimators': 687, 'reg_lambda': 0.24015841292326046, 'subsample':
0.8811710182614528}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:17,463] Trial 62 finished with value: 0.009635514700423028
and parameters: {'learning_rate': 0.2604445201855609, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2439358611883157, 'subsample':
0.8809533935495686}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:17,895] Trial 63 finished with value: 0.010071473625637692
and parameters: {'learning_rate': 0.26217121347591577, 'max_depth': 10,
'n_estimators': 692, 'reg_lambda': 0.23661713973469822, 'subsample':
0.8810591857962139}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:18,343] Trial 64 finished with value: 0.009771192717782507
and parameters: {'learning_rate': 0.2671956414126749, 'max_depth': 10,
'n_estimators': 645, 'reg_lambda': 0.24750367846108423, 'subsample':
0.8813597203267068}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:18,851] Trial 65 finished with value: 0.009390908642487138
and parameters: {'learning_rate': 0.27179397528552923, 'max_depth': 10,

'n_estimators': 683, 'reg_lambda': 0.24170374856357518, 'subsample':
0.8816017042515791}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:20,308] Trial 66 finished with value: 0.009783551975508785
and parameters: {'learning_rate': 0.29702212567128833, 'max_depth': 10,
'n_estimators': 696, 'reg_lambda': 0.23769761200690756, 'subsample':
0.8805893208546341}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:22,137] Trial 67 finished with value: 0.009267674869125686
and parameters: {'learning_rate': 0.28081144252027934, 'max_depth': 10,
'n_estimators': 642, 'reg_lambda': 0.23193803903550195, 'subsample':
0.880417475399098}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:23,982] Trial 68 finished with value: 0.009643635273614557
and parameters: {'learning_rate': 0.2643485781452172, 'max_depth': 10,
'n_estimators': 689, 'reg_lambda': 0.24770427383533347, 'subsample':
0.8801075050168673}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:24,401] Trial 69 finished with value: 0.010852008035999911
and parameters: {'learning_rate': 0.29196710319695596, 'max_depth': 11,
'n_estimators': 680, 'reg_lambda': 0.22616670217418505, 'subsample':
0.8822107523314574}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:24,835] Trial 70 finished with value: 0.009705641325585976
and parameters: {'learning_rate': 0.26173763370578546, 'max_depth': 10,
'n_estimators': 651, 'reg_lambda': 0.25366297034002444, 'subsample':
0.8815390643258398}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:25,273] Trial 71 finished with value: 0.009749519900358458
and parameters: {'learning_rate': 0.2683160104860419, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.22741058660795355, 'subsample':
0.8801461417086627}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:25,723] Trial 72 finished with value: 0.010224074296123238
and parameters: {'learning_rate': 0.26673956269764804, 'max_depth': 10,
'n_estimators': 636, 'reg_lambda': 0.22944133277832088, 'subsample':
0.8803590897304024}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:26,153] Trial 73 finished with value: 0.009290982250722125
and parameters: {'learning_rate': 0.2691048148718696, 'max_depth': 10,
'n_estimators': 695, 'reg_lambda': 0.21908392166332272, 'subsample':
0.8806792642650012}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:26,606] Trial 74 finished with value: 0.009729845348427947
and parameters: {'learning_rate': 0.26369467285725495, 'max_depth': 10,
'n_estimators': 633, 'reg_lambda': 0.23414825511154025, 'subsample':
0.8808621573874154}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:27,042] Trial 75 finished with value: 0.011025706966037562
and parameters: {'learning_rate': 0.2757676123348771, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.24165530722216627, 'subsample':
0.8810995973875879}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:27,486] Trial 76 finished with value: 0.008917169373014289
and parameters: {'learning_rate': 0.2708204298516653, 'max_depth': 10,
'n_estimators': 699, 'reg_lambda': 0.22369159547213022, 'subsample':
0.8805559365763949}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:27,924] Trial 77 finished with value: 0.009042769487830187
and parameters: {'learning_rate': 0.270954137169864, 'max_depth': 10,

'n_estimators': 700, 'reg_lambda': 0.22049615263869884, 'subsample':
0.881319980689848}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:28,346] Trial 78 finished with value: 0.009021148869842557
and parameters: {'learning_rate': 0.30119283258392016, 'max_depth': 10,
'n_estimators': 698, 'reg_lambda': 0.24640684081649605, 'subsample':
0.8806127472629753}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:28,786] Trial 79 finished with value: 0.009623798382692684
and parameters: {'learning_rate': 0.26626354610813313, 'max_depth': 10,
'n_estimators': 659, 'reg_lambda': 0.21089810287096505, 'subsample':
0.8845323974212987}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:29,224] Trial 80 finished with value: 0.008847134421583231
and parameters: {'learning_rate': 0.26195825680348755, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.2499075408732559, 'subsample':
0.8810219220841271}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:29,688] Trial 81 finished with value: 0.009499054629722859
and parameters: {'learning_rate': 0.26186599637260716, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2503535662477315, 'subsample':
0.8809999336304087}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:30,149] Trial 82 finished with value: 0.00990355529672142
and parameters: {'learning_rate': 0.28859728788129085, 'max_depth': 10,
'n_estimators': 657, 'reg_lambda': 0.24290924293347893, 'subsample':
0.8811846152039363}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:30,561] Trial 83 finished with value: 0.009392934597152389
and parameters: {'learning_rate': 0.2942339573587995, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.25505499826101036, 'subsample':
0.8804631775249957}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:31,034] Trial 84 finished with value: 0.009064985376768838
and parameters: {'learning_rate': 0.2608816569466522, 'max_depth': 10,
'n_estimators': 663, 'reg_lambda': 0.23806480904657273, 'subsample':
0.8808759918863078}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:31,456] Trial 85 finished with value: 0.009492384236068184
and parameters: {'learning_rate': 0.26544099784713643, 'max_depth': 10,
'n_estimators': 638, 'reg_lambda': 0.2408370532135874, 'subsample':
0.8813847368891558}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:31,906] Trial 86 finished with value: 0.009558363684666778
and parameters: {'learning_rate': 0.26357297724075435, 'max_depth': 10,
'n_estimators': 646, 'reg_lambda': 0.24917311624749608, 'subsample':
0.8807802591863737}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:32,336] Trial 87 finished with value: 0.010325693717816973
and parameters: {'learning_rate': 0.2987206869349488, 'max_depth': 10,
'n_estimators': 692, 'reg_lambda': 0.24335311041743699, 'subsample':
0.8814722851011483}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:32,791] Trial 88 finished with value: 0.01022036563831014
and parameters: {'learning_rate': 0.29710200454085667, 'max_depth': 10,
'n_estimators': 648, 'reg_lambda': 0.22360936769385498, 'subsample':
0.8819627091330264}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:33,213] Trial 89 finished with value: 0.00866516145779233
and parameters: {'learning_rate': 0.26301573750303137, 'max_depth': 10,

'n_estimators': 642, 'reg_lambda': 0.23080479399773693, 'subsample':
0.8818113078195444}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:33,660] Trial 90 finished with value: 0.009430886120331666
and parameters: {'learning_rate': 0.2726711775335173, 'max_depth': 10,
'n_estimators': 689, 'reg_lambda': 0.23139314088520976, 'subsample':
0.8817089862258949}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:35,369] Trial 91 finished with value: 0.00937145426582826
and parameters: {'learning_rate': 0.26268315677225973, 'max_depth': 10,
'n_estimators': 642, 'reg_lambda': 0.23908489589439508, 'subsample':
0.8810416062285892}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:37,256] Trial 92 finished with value: 0.009550727966203468
and parameters: {'learning_rate': 0.260079216815741, 'max_depth': 10,
'n_estimators': 654, 'reg_lambda': 0.23490715581764238, 'subsample':
0.8812445439661488}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:38,970] Trial 93 finished with value: 0.009676279406270976
and parameters: {'learning_rate': 0.2643392363152627, 'max_depth': 10,
'n_estimators': 648, 'reg_lambda': 0.2276716798266041, 'subsample':
0.8805366175168032}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:39,408] Trial 94 finished with value: 0.010447740811492873
and parameters: {'learning_rate': 0.2913561384658119, 'max_depth': 10,
'n_estimators': 695, 'reg_lambda': 0.24654751866774696, 'subsample':
0.8806756406320194}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:39,852] Trial 95 finished with value: 0.009323738815686853
and parameters: {'learning_rate': 0.2660923970577112, 'max_depth': 10,
'n_estimators': 632, 'reg_lambda': 0.2242966921644293, 'subsample':
0.8808854650278125}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:40,304] Trial 96 finished with value: 0.009599061053151363
and parameters: {'learning_rate': 0.2629192894322885, 'max_depth': 10,
'n_estimators': 643, 'reg_lambda': 0.23604307119992707, 'subsample':
0.881128534544979}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:40,698] Trial 97 finished with value: 0.009254041370713612
and parameters: {'learning_rate': 0.3145213407621855, 'max_depth': 10,
'n_estimators': 639, 'reg_lambda': 0.24396482678371945, 'subsample':
0.8828178743880013}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:41,178] Trial 98 finished with value: 0.008456212276927843
and parameters: {'learning_rate': 0.2612138963838485, 'max_depth': 10,
'n_estimators': 652, 'reg_lambda': 0.24924315735141536, 'subsample':
0.880373215041565}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:41,625] Trial 99 finished with value: 0.00936464463739781
and parameters: {'learning_rate': 0.27018409571654756, 'max_depth': 10,
'n_estimators': 651, 'reg_lambda': 0.25502217264722177, 'subsample':
0.880177595600181}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:42,042] Trial 100 finished with value: 0.009346997994589034
and parameters: {'learning_rate': 0.2678490769412504, 'max_depth': 10,
'n_estimators': 656, 'reg_lambda': 0.2524201023189071, 'subsample':
0.8803660778259691}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:42,523] Trial 101 finished with value: 0.00900999923658771
and parameters: {'learning_rate': 0.2609527718412874, 'max_depth': 10,

'n_estimators': 650, 'reg_lambda': 0.24917475213109494, 'subsample':
0.8804986439546504}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:42,960] Trial 102 finished with value: 0.009544954180300236
and parameters: {'learning_rate': 0.26142470994009487, 'max_depth': 10,
'n_estimators': 653, 'reg_lambda': 0.2509749381615055, 'subsample':
0.8807495131886689}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:43,448] Trial 103 finished with value: 0.008582206832860075
and parameters: {'learning_rate': 0.2646466037894767, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.25884232168818966, 'subsample':
0.8809817719846464}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:43,887] Trial 104 finished with value: 0.008427394084461333
and parameters: {'learning_rate': 0.26489833187421175, 'max_depth': 10,
'n_estimators': 688, 'reg_lambda': 0.2605609058435829, 'subsample':
0.8809627190902065}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:44,386] Trial 105 finished with value: 0.008844786687768861
and parameters: {'learning_rate': 0.2650749206898724, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.26106528774154, 'subsample':
0.8814326859062588}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:44,841] Trial 106 finished with value: 0.009334344438369035
and parameters: {'learning_rate': 0.26502037315253196, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.26055910018869877, 'subsample':
0.8814882432456851}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:45,328] Trial 107 finished with value: 0.009907855268649063
and parameters: {'learning_rate': 0.2669753252789433, 'max_depth': 10,
'n_estimators': 687, 'reg_lambda': 0.2704962811684041, 'subsample':
0.8818001606357494}. Best is trial 12 with value: 0.008132588457769187.
[I 2024-08-30 19:58:45,798] Trial 108 finished with value: 0.008087901360336427
and parameters: {'learning_rate': 0.2640697978857865, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.2588357092740334, 'subsample':
0.8813040201861229}. Best is trial 108 with value: 0.008087901360336427.
[I 2024-08-30 19:58:46,264] Trial 109 finished with value: 0.00805966220863979
and parameters: {'learning_rate': 0.2635379978405222, 'max_depth': 10,
'n_estimators': 690, 'reg_lambda': 0.267561097189248, 'subsample':
0.8813167583158311}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:46,728] Trial 110 finished with value: 0.009418550663868 75
and parameters: {'learning_rate': 0.26352315911122953, 'max_depth': 10,
'n_estimators': 688, 'reg_lambda': 0.2671015242239507, 'subsample':
0.8812625061036876}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:47,169] Trial 111 finished with value: 0.008717513151315812
and parameters: {'learning_rate': 0.2686936380506353, 'max_depth': 10,
'n_estimators': 691, 'reg_lambda': 0.2633075961839808, 'subsample':
0.8809228191280767}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:47,654] Trial 112 finished with value: 0.009268337714277479
and parameters: {'learning_rate': 0.2690286167441115, 'max_depth': 10,
'n_estimators': 690, 'reg_lambda': 0.26285232738252556, 'subsample':
0.8808633079722329}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:48,119] Trial 113 finished with value: 0.009848066644722668
and parameters: {'learning_rate': 0.2938825491313147, 'max_depth': 10,

'n_estimators': 693, 'reg_lambda': 0.27424749096684536, 'subsample':
0.881230562856349}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:48,726] Trial 114 finished with value: 0.00952270383272022
and parameters: {'learning_rate': 0.26613534930198723, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.26710198609150704, 'subsample':
0.8807103176118873}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:50,609] Trial 115 finished with value: 0.008710576249145964
and parameters: {'learning_rate': 0.2680440862748404, 'max_depth': 10,
'n_estimators': 690, 'reg_lambda': 0.2642568336684338, 'subsample':
0.8816180340875857}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:52,430] Trial 116 finished with value: 0.009030405330511044
and parameters: {'learning_rate': 0.26766668142391603, 'max_depth': 10,
'n_estimators': 688, 'reg_lambda': 0.26429251972686923, 'subsample':
0.8813438840955455}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:53,403] Trial 117 finished with value: 0.008914979985650126
and parameters: {'learning_rate': 0.2684790351315883, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2580223204766883, 'subsample':
0.8816711601695728}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:53,855] Trial 118 finished with value: 0.009894304413320653
and parameters: {'learning_rate': 0.29676850702377255, 'max_depth': 10,
'n_estimators': 690, 'reg_lambda': 0.2591850859779951, 'subsample':
0.8821790020341004}. Best is trial 109 with value: 0.00805966220863979.
[I 2024-08-30 19:58:54,302] Trial 119 finished with value: 0.007878862186158216
and parameters: {'learning_rate': 0.26343349763260054, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2656753856846987, 'subsample':
0.8818210045021196}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:54,782] Trial 120 finished with value: 0.009182509472879097
and parameters: {'learning_rate': 0.26422014054957244, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.26527341879852295, 'subsample':
0.8818186250890844}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:55,250] Trial 121 finished with value: 0.008578501765896206
and parameters: {'learning_rate': 0.26319352165588644, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26815176684961795, 'subsample':
0.8816094475786533}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:55,682] Trial 122 finished with value: 0.009044898629333166
and parameters: {'learning_rate': 0.2627338062477188, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26870820609119317, 'subsample':
0.8815830557825989}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:56,162] Trial 123 finished with value: 0.00844888579963395
and parameters: {'learning_rate': 0.26695516248545353, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.26217394849782566, 'subsample':
0.882072073104853}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:56,614] Trial 124 finished with value: 0.008749773029935529
and parameters: {'learning_rate': 0.26584485541167197, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.2673515003474767, 'subsample':
0.8820740946180333}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:57,107] Trial 125 finished with value: 0.008723724922009046
and parameters: {'learning_rate': 0.26411511444919955, 'max_depth': 10,

'n_estimators': 685, 'reg_lambda': 0.275081163170404, 'subsample':
0.8823338312916024}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:57,556] Trial 126 finished with value: 0.009193337350903042
and parameters: {'learning_rate': 0.26652097428606725, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2656339228622174, 'subsample':
0.8817834149120054}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:58,034] Trial 127 finished with value: 0.008744388832846678
and parameters: {'learning_rate': 0.2628903805719765, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.259092348148938, 'subsample':
0.8818928711319411}. Best is trial 119 with value: 0.007878862186158216.
[I 2024-08-30 19:58:58,498] Trial 128 finished with value: 0.007642841398726528
and parameters: {'learning_rate': 0.2644961580263873, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2566650156583211, 'subsample':
0.8816640558548712}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:58:58,974] Trial 129 finished with value: 0.009305029733895928
and parameters: {'learning_rate': 0.2648586486294241, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2565922181903419, 'subsample':
0.8820330273713484}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:58:59,450] Trial 130 finished with value: 0.00920990198050717
and parameters: {'learning_rate': 0.2624738622490034, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2615976845760697, 'subsample':
0.8819177384364627}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:58:59,924] Trial 131 finished with value: 0.008744045906987833
and parameters: {'learning_rate': 0.2674229634120213, 'max_depth': 10,
'n_estimators': 688, 'reg_lambda': 0.2716555310047604, 'subsample':
0.8815141251900075}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:00,462] Trial 132 finished with value: 0.009441826644057771
and parameters: {'learning_rate': 0.2638879518693515, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2574282755108768, 'subsample':
0.8816571665042198}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:00,935] Trial 133 finished with value: 0.008039149651007944
and parameters: {'learning_rate': 0.26570891099259397, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2640955650722714, 'subsample':
0.8815919177176045}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:01,436] Trial 134 finished with value: 0.007700436574586051
and parameters: {'learning_rate': 0.26538518904661806, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.26040580795353346, 'subsample':
0.8822322266487999}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:01,902] Trial 135 finished with value: 0.008748123902822907
and parameters: {'learning_rate': 0.2664249890632211, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.26088195431536093, 'subsample':
0.8824616703754963}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:02,386] Trial 136 finished with value: 0.009432320005511969
and parameters: {'learning_rate': 0.265418281052274, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.25606538463013817, 'subsample':
0.8817372253689472}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:02,882] Trial 137 finished with value: 0.009598545656763071
and parameters: {'learning_rate': 0.2614755078557045, 'max_depth': 10,

'n_estimators': 671, 'reg_lambda': 0.25979395708136344, 'subsample':
0.8822274119823563}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:04,580] Trial 138 finished with value: 0.008543696808474199
and parameters: {'learning_rate': 0.2704354314668879, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2624786984406331, 'subsample':
0.8819816152436067}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:06,572] Trial 139 finished with value: 0.009079146625563675
and parameters: {'learning_rate': 0.26999940746582374, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26254423532517296, 'subsample':
0.8820018048722831}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:08,404] Trial 140 finished with value: 0.00844463083517112
and parameters: {'learning_rate': 0.26703800052552834, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.26778394249439574, 'subsample':
0.8825746492303876}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:08,853] Trial 141 finished with value: 0.008077191129993104
and parameters: {'learning_rate': 0.2714105098033248, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26958254570210977, 'subsample':
0.8826010671452628}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:09,305] Trial 142 finished with value: 0.009942218114471175
and parameters: {'learning_rate': 0.27532985098735174, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26819366541177775, 'subsample':
0.8825901795559715}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:09,763] Trial 143 finished with value: 0.008434906671487467
and parameters: {'learning_rate': 0.2710797977773681, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.27049913338535697, 'subsample':
0.8826197585440276}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:10,215] Trial 144 finished with value: 0.009193794446142298
and parameters: {'learning_rate': 0.2716504361925544, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.2736066600412074, 'subsample':
0.882816271166488}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:10,684] Trial 145 finished with value: 0.008000237994131578
and parameters: {'learning_rate': 0.2706291374183988, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2701264516934865, 'subsample':
0.8826766065964777}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:11,194] Trial 146 finished with value: 0.008615575450311547
and parameters: {'learning_rate': 0.27352073473751226, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.27055582999164457, 'subsample':
0.8829508527977755}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:11,662] Trial 147 finished with value: 0.008728477642679686
and parameters: {'learning_rate': 0.27274920886717163, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2778296768591492, 'subsample':
0.8823436849531229}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:12,128] Trial 148 finished with value: 0.010186284447241714
and parameters: {'learning_rate': 0.2768659682239153, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.27265148601554473, 'subsample':
0.882714395545291}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:12,630] Trial 149 finished with value: 0.008723988102913697
and parameters: {'learning_rate': 0.2697788598048394, 'max_depth': 10,

'n_estimators': 671, 'reg_lambda': 0.2656420711252451, 'subsample':
0.882576185528426}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:13,116] Trial 150 finished with value: 0.00960683205923959
and parameters: {'learning_rate': 0.27139418210336186, 'max_depth': 10,
'n_estimators': 663, 'reg_lambda': 0.2700472756607442, 'subsample':
0.88327728369743}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:13,600] Trial 151 finished with value: 0.009744260652433268
and parameters: {'learning_rate': 0.2697388604103601, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2634843352122065, 'subsample':
0.8824720301008198}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:14,047] Trial 152 finished with value: 0.008344950764676564
and parameters: {'learning_rate': 0.2669287875506315, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2664995245004643, 'subsample':
0.8827141244799497}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:14,498] Trial 153 finished with value: 0.009262707225566491
and parameters: {'learning_rate': 0.26661995889717555, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2667987914068274, 'subsample':
0.8829287340182178}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:14,989] Trial 154 finished with value: 0.008390306257293168
and parameters: {'learning_rate': 0.2676159632215907, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2691904300560285, 'subsample':
0.8822714569893906}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:15,469] Trial 155 finished with value: 0.008720265035881284
and parameters: {'learning_rate': 0.2675492238815553, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2693393859483058, 'subsample':
0.8826303739594044}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:15,961] Trial 156 finished with value: 0.008448555783017947
and parameters: {'learning_rate': 0.26854836991356146, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.27625904107929955, 'subsample':
0.8825133543201253}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:16,422] Trial 157 finished with value: 0.009122732201661527
and parameters: {'learning_rate': 0.26858668850053885, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.27209626935558706, 'subsample':
0.8827469876476967}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:16,893] Trial 158 finished with value: 0.008204445638097867
and parameters: {'learning_rate': 0.2732283951535906, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2657177087563977, 'subsample':
0.8825107092524955}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:17,340] Trial 159 finished with value: 0.009080647993947234
and parameters: {'learning_rate': 0.2733645409198372, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2704260407013246, 'subsample':
0.8830981632197993}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:17,787] Trial 160 finished with value: 0.009117056950969114
and parameters: {'learning_rate': 0.27476033891002966, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2662955624154346, 'subsample':
0.8829052256319179}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:18,328] Trial 161 finished with value: 0.009263758398944676
and parameters: {'learning_rate': 0.27104486956875923, 'max_depth': 10,

'n_estimators': 670, 'reg_lambda': 0.2686776850191499, 'subsample':
0.8824805877030779}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:19,928] Trial 162 finished with value: 0.008640071984250522
and parameters: {'learning_rate': 0.2691454020059649, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.2647760903556718, 'subsample':
0.8822835942002413}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:22,146] Trial 163 finished with value: 0.009207585571470875
and parameters: {'learning_rate': 0.2720614182744569, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.27672169027371063, 'subsample':
0.88251539718573}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:23,431] Trial 164 finished with value: 0.00830448825157917
and parameters: {'learning_rate': 0.2655036592066741, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2752097192060616, 'subsample':
0.8826962048566044}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:23,870] Trial 165 finished with value: 0.008850648084200649
and parameters: {'learning_rate': 0.2656665718155944, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.27297716884897383, 'subsample':
0.8827258386747939}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:24,338] Trial 166 finished with value: 0.008658059408007792
and parameters: {'learning_rate': 0.2674385217725506, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.27977682192350956, 'subsample':
0.882644980137207 9}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:24,774] Trial 167 finished with value: 0.008764901764862273
and parameters: {'learning_rate': 0.26563769851622876, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.27530718404128945, 'subsample':
0.8832587111432586}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:25,283] Trial 168 finished with value: 0.00870857502090139
and parameters: {'learning_rate': 0.2646553468188311, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.26596021940226994, 'subsample':
0.8823989927803192}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:25,716] Trial 169 finished with value: 0.00923914407615782
and parameters: {'learning_rate': 0.2706537915728759, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.27053298226351147, 'subsample':
0.88278336810225}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:26,186] Trial 170 finished with value: 0.010654191738356088
and parameters: {'learning_rate': 0.28820595114019004, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.26832519479183425, 'subsample':
0.8822814653737602}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:26,627] Trial 171 finished with value: 0.009193347723287643
and parameters: {'learning_rate': 0.2684528754192133, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.2775023667671038, 'subsample':
0.882554036107744}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:27,097] Trial 172 finished with value: 0.008887201730273447
and parameters: {'learning_rate': 0.2671071922691582, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.27482223450428483, 'subsample':
0.882184043406044}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:27,551] Trial 173 finished with value: 0.008370112970049318
and parameters: {'learning_rate': 0.2691149349567365, 'max_depth': 10,

'n_estimators': 662, 'reg_lambda': 0.2643266176579685, 'subsample':
0.8824257168448997}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:28,007] Trial 174 finished with value: 0.00896991131174005
and parameters: {'learning_rate': 0.2658578754822577, 'max_depth': 10,
'n_estimators': 662, 'reg_lambda': 0.2640956901248987, 'subsample':
0.8830498724699403}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:28,481] Trial 175 finished with value: 0.008618941764944562
and parameters: {'learning_rate': 0.2642404106444186, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2669410216007532, 'subsample':
0.882682861714274}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:28,919] Trial 176 finished with value: 0.007722740682559866
and parameters: {'learning_rate': 0.26982144987384565, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.264677848932105, 'subsample':
0.8823820888157238}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:29,401] Trial 177 finished with value: 0.00923638143793308
and parameters: {'learning_rate': 0.27212772514605116, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2645257757726631, 'subsample':
0.8823677256350909}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:29,830] Trial 178 finished with value: 0.009276724408730948
and parameters: {'learning_rate': 0.2696726367459876, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2603654737739142, 'subsample':
0.8821774387982304}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:30,333] Trial 179 finished with value: 0.008574893165413959
and parameters: {'learning_rate': 0.274169871944128, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.27134299894971803, 'subsample':
0.8828745603201571}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:30,827] Trial 180 finished with value: 0.009089737868380963
and parameters: {'learning_rate': 0.27069239793119176, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.2691895447958137, 'subsample':
0.8823782066088548}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:31,312] Trial 181 finished with value: 0.007851568011495908
and parameters: {'learning_rate': 0.26755250101929073, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26580239282841644, 'subsample':
0.8825830100315009}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:31,760] Trial 182 finished with value: 0.008083445685321704
and parameters: {'learning_rate': 0.2676918921879048, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2615054239981309, 'subsample':
0.8824228123995114}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:32,206] Trial 183 finished with value: 0.008775396581122497
and parameters: {'learning_rate': 0.2677906057041107, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2619087379521645, 'subsample':
0.8821642444706392}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:32,671] Trial 184 finished with value: 0.008696135718818577
and parameters: {'learning_rate': 0.2656305305862193, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2653453034494113, 'subsample':
0.8824363215097343}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:33,124] Trial 185 finished with value: 0.009191191035663815
and parameters: {'learning_rate': 0.2688439628136388, 'max_depth': 10,

'n_estimators': 671, 'reg_lambda': 0.2634689191929744, 'subsample':
0.8813593859996272}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:35,040] Trial 186 finished with value: 0.008664648782922436
and parameters: {'learning_rate': 0.2666643459605228, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2607847661435367, 'subsample':
0.8822956170972663}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:37,286] Trial 187 finished with value: 0.008782639588754072
and parameters: {'learning_rate': 0.26402306691596933, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.258049364873917, 'subsample':
0.8811065373275987}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:38,759] Trial 188 finished with value: 0.009569164243274699
and parameters: {'learning_rate': 0.26507369157467214, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2657596050879665, 'subsample':
0.8828276719027424}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:39,219] Trial 189 finished with value: 0.008258956412915675
and parameters: {'learning_rate': 0.2692112703606759, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2635983427281576, 'subsample':
0.8824167105295084}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:39,670] Trial 190 finished with value: 0.008567386585737956
and parameters: {'learning_rate': 0.2686519042585926, 'max_depth': 10,
'n_estimators': 659, 'reg_lambda': 0.26389584879793615, 'subsample':
0.882464226150483}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:40,141] Trial 191 finished with value: 0.008897569860130511
and parameters: {'learning_rate': 0.26970369272921074, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2623049174063039, 'subsample':
0.8826705546482293}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:40,563] Trial 192 finished with value: 0.010561448472314139
and parameters: {'learning_rate': 0.2907532002612853, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.25999952205799765, 'subsample':
0.8823584809049759}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:41,055] Trial 193 finished with value: 0.009212914332093078
and parameters: {'learning_rate': 0.2667110341752791, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2670351192518215, 'subsample':
0.8812672110775726}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:41,514] Trial 194 finished with value: 0.009558469142590344
and parameters: {'learning_rate': 0.2680649207198645, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.26427197027308874, 'subsample':
0.882524156502949}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:41,973] Trial 195 finished with value: 0.008714562928320664
and parameters: {'learning_rate': 0.2635266777535515, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2617148500742966, 'subsample':
0.8821276497401981}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:42,420] Trial 196 finished with value: 0.009081135265659466
and parameters: {'learning_rate': 0.2695561704116818, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.26551388702890133, 'subsample':
0.8848845431745047}. Best is trial 128 with value: 0.007642841398726528.
[I 2024-08-30 19:59:42,865] Trial 197 finished with value: 0.007517915651276574
and parameters: {'learning_rate': 0.2654027984781976, 'max_depth': 10,

'n_estimators': 674, 'reg_lambda': 0.26875293897836183, 'subsample':
0.8822772147555745}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:43,343] Trial 198 finished with value: 0.00982049168761486
and parameters: {'learning_rate': 0.2794838429403864, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26791584679565267, 'subsample':
0.882378067942104}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:43,786] Trial 199 finished with value: 0.008610015897595594
and parameters: {'learning_rate': 0.2663853723789141, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2692310262350028, 'subsample':
0.8822632215169842}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:44,256] Trial 200 finished with value: 0.008878454739399957
and parameters: {'learning_rate': 0.26785311236795656, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2668459221805639, 'subsample':
0.882598137334194}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:44,701] Trial 201 finished with value: 0.009492416621154794
and parameters: {'learning_rate': 0.26504066317198977, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.25849086925506715, 'subsample':
0.8827295730441453}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:45,210] Trial 202 finished with value: 0.009278137882572124
and parameters: {'learning_rate': 0.2630007128053089, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.20047614150697624, 'subsample':
0.8814431831723494}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:45,694] Trial 203 finished with value: 0.008013711659642667
and parameters: {'learning_rate': 0.2652869965529467, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.26268022834951416, 'subsample':
0.8824354794973057}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:46,185] Trial 204 finished with value: 0.008821003252078295
and parameters: {'learning_rate': 0.26613212871086417, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.26494042556366987, 'subsample':
0.8824661862354378}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:46,633] Trial 205 finished with value: 0.008719564011936732
and parameters: {'learning_rate': 0.26737456187195685, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.26321389820193286, 'subsample':
0.8820984125368678}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:47,139] Trial 206 finished with value: 0.009737143949003726
and parameters: {'learning_rate': 0.2639080088428727, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2689313239176644, 'subsample':
0.8822592332059509}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:47,596] Trial 207 finished with value: 0.008803144862574783
and parameters: {'learning_rate': 0.2724885331894359, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26642922659913565, 'subsample':
0.8826139579492134}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:48,078] Trial 208 finished with value: 0.008401779823864513
and parameters: {'learning_rate': 0.2699942369132944, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2627841349404968, 'subsample':
0.8824000748418849}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:48,681] Trial 209 finished with value: 0.008723222757040128
and parameters: {'learning_rate': 0.2654929610306494, 'max_depth': 10,

'n_estimators': 677, 'reg_lambda': 0.2718333292894181, 'subsample':
0.8819653079334899}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:50,216] Trial 210 finished with value: 0.010424495793137754
and parameters: {'learning_rate': 0.2623864407526438, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.26491842592810394, 'subsample':
0.8828226502394613}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:53,350] Trial 211 finished with value: 0.008326026661876795
and parameters: {'learning_rate': 0.2704102406124895, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2626729705988898, 'subsample':
0.8824433914671446}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:53,886] Trial 212 finished with value: 0.008810551758450245
and parameters: {'learning_rate': 0.2708294926501043, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2614509945681737, 'subsample':
0.8825167771171534}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:54,338] Trial 213 finished with value: 0.008477944723790827
and parameters: {'learning_rate': 0.2684479167310016, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.263574336283433, 'subsample':
0.8822714892928202}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:54,774] Trial 214 finished with value: 0.008346540077684272
and parameters: {'learning_rate': 0.2692508636189572, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.25966548369259324, 'subsample':
0.8826695758553207}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:55,248] Trial 215 finished with value: 0.009699520861339376
and parameters: {'learning_rate': 0.2720679166370475, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2555843767500025, 'subsample':
0.8827402547022163}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:55,713] Trial 216 finished with value: 0.008588130981206794
and parameters: {'learning_rate': 0.26942540322820446, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2596073267970604, 'subsample':
0.8825444847728324}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:56,161] Trial 217 finished with value: 0.009158437228034423
and parameters: {'learning_rate': 0.267159666884392, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.26141296754471094, 'subsample':
0.8829605751222951}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:56,638] Trial 218 finished with value: 0.009173370995285632
and parameters: {'learning_rate': 0.2714882346001729, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.25722806308403956, 'subsample':
0.8826396738753938}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:57,095] Trial 219 finished with value: 0.008565203324578954
and parameters: {'learning_rate': 0.2688241982682536, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2675245864403328, 'subsample':
0.8823922010763581}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:57,610] Trial 220 finished with value: 0.008480003487201303
and parameters: {'learning_rate': 0.2661627924454734, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26544356568621946, 'subsample':
0.8822154862913325}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:58,058] Trial 221 finished with value: 0.008405801198736905
and parameters: {'learning_rate': 0.26799473736981605, 'max_depth': 10,

'n_estimators': 674, 'reg_lambda': 0.263195634013553, 'subsample':
0.8824582629602599}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:58,490] Trial 222 finished with value: 0.008350616574958976
and parameters: {'learning_rate': 0.2701175959456326, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2594520471526071, 'subsample':
0.8836086095902179}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:58,947] Trial 223 finished with value: 0.008323958441336671
and parameters: {'learning_rate': 0.2703156428427302, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.25897842569736823, 'subsample':
0.882716153394305}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:59,420] Trial 224 finished with value: 0.009246041676474326
and parameters: {'learning_rate': 0.2703466822954375, 'max_depth': 10,
'n_estimators': 661, 'reg_lambda': 0.25919029898244045, 'subsample':
0.8826522951541501}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 19:59:59,876] Trial 225 finished with value: 0.008592266475194876
and parameters: {'learning_rate': 0.2725898296940315, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.25347321070634987, 'subsample':
0.88376611270425}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:00,442] Trial 226 finished with value: 0.007520901417153597
and parameters: {'learning_rate': 0.27122153094778156, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2579748463535803, 'subsample':
0.8843386230510951}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:01,169] Trial 227 finished with value: 0.008800832237404927
and parameters: {'learning_rate': 0.27323377324501413, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2564743153582057, 'subsample':
0.8848369116865729}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:01,710] Trial 228 finished with value: 0.008682020372343701
and parameters: {'learning_rate': 0.27131884729429223, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.25860413550046757, 'subsample':
0.884412682187195}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:02,175] Trial 229 finished with value: 0.00836936995114607
and parameters: {'learning_rate': 0.27044179022459613, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2602560098799738, 'subsample':
0.8828333505668151}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:02,644] Trial 230 finished with value: 0.010026466969466496
and parameters: {'learning_rate': 0.2838113067376553, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2572446047350328, 'subsample':
0.8855196946795265}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:03,126] Trial 231 finished with value: 0.009099171154327913
and parameters: {'learning_rate': 0.27168900957247766, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.26043466704637735, 'subsample':
0.8842052091706099}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:03,769] Trial 232 finished with value: 0.009327401448167832
and parameters: {'learning_rate': 0.2705995386263571, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.25983787755315446, 'subsample':
0.8829964272923325}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:05,376] Trial 233 finished with value: 0.008086356551850572
and parameters: {'learning_rate': 0.2700457486928596, 'max_depth': 10,

'n_estimators': 675, 'reg_lambda': 0.2612009072769679, 'subsample':
0.8827786684268771}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:07,328] Trial 234 finished with value: 0.009230862948073756
and parameters: {'learning_rate': 0.27002442978035773, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.25452529908979915, 'subsample':
0.8835345732372109}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:09,004] Trial 235 finished with value: 0.008518883842081368
and parameters: {'learning_rate': 0.2643280306413377, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2617247576336038, 'subsample':
0.882690319517082}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:09,472] Trial 236 finished with value: 0.009211753458225015
and parameters: {'learning_rate': 0.27401081727577287, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2583462610222167, 'subsample':
0.8846244146344864}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:09,919] Trial 237 finished with value: 0.009032719159711421
and parameters: {'learning_rate': 0.26953129776121487, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2623728012665978, 'subsample':
0.8827768480135672}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:10,406] Trial 238 finished with value: 0.008701658729979895
and parameters: {'learning_rate': 0.2719644789772843, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2615730591408569, 'subsample':
0.8841403415754803}. Best is trial 197 with value: 0.007517915651276574.
[I 2024-08-30 20:00:10,853] Trial 239 finished with value: 0.007192987497682152
and parameters: {'learning_rate': 0.2648532944739505, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2577326000731398, 'subsample':
0.8825649768376913}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:11,383] Trial 240 finished with value: 0.011461643378825192
and parameters: {'learning_rate': 0.2930743756598108, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.2580517095822689, 'subsample':
0.8826009286796752}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:11,851] Trial 241 finished with value: 0.008583365947799005
and parameters: {'learning_rate': 0.26530773338220354, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2563256107233275, 'subsample':
0.8831610993591594}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:12,358] Trial 242 finished with value: 0.008972625790716712
and parameters: {'learning_rate': 0.26270292209451196, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.25870965959064796, 'subsample':
0.8835280744318224}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:12,822] Trial 243 finished with value: 0.008674449603788194
and parameters: {'learning_rate': 0.2641258249803495, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26082667916992774, 'subsample':
0.8839916151456924}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:13,337] Trial 244 finished with value: 0.009163588163149305
and parameters: {'learning_rate': 0.26643767347996405, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2631880663096369, 'subsample':
0.8825680239605388}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:13,796] Trial 245 finished with value: 0.009308102563008968
and parameters: {'learning_rate': 0.26515850121380935, 'max_depth': 10,

'n_estimators': 669, 'reg_lambda': 0.26601936145039096, 'subsample':
0.8828972960670404}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:14,277] Trial 246 finished with value: 0.008943725769544764
and parameters: {'learning_rate': 0.2688796412692384, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.25927206479563836, 'subsample':
0.8827863254772889}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:14,765] Trial 247 finished with value: 0.009211134252923626
and parameters: {'learning_rate': 0.2636014282529466, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.25712002837907505, 'subsample':
0.8826996379075872}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:15,259] Trial 248 finished with value: 0.009726084881399732
and parameters: {'learning_rate': 0.26756162365897057, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2037435018299058, 'subsample':
0.8825336774326329}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:15,764] Trial 249 finished with value: 0.01019890631484391
and parameters: {'learning_rate': 0.2948691776649649, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26407651478087724, 'subsample':
0.88248849290233}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:16,254] Trial 250 finished with value: 0.008512316757985056
and parameters: {'learning_rate': 0.27062896236388884, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.25527332418364135, 'subsample':
0.8827037968172927}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:16,745] Trial 251 finished with value: 0.008453433404498572
and parameters: {'learning_rate': 0.26506561264955447, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.26765346053362005, 'subsample':
0.8815315704510265}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:17,244] Trial 252 finished with value: 0.008500837529694738
and parameters: {'learning_rate': 0.266422541957778, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2620772029862717, 'subsample':
0.8823924916548651}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:17,779] Trial 253 finished with value: 0.00827237395853706
and parameters: {'learning_rate': 0.26843823282625806, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2598405966658786, 'subsample':
0.8825632617101163}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:18,285] Trial 254 finished with value: 0.009171323758088185
and parameters: {'learning_rate': 0.26829221066789394, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.266251766487208, 'subsample':
0.8858397998700738}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:18,976] Trial 255 finished with value: 0.011382176401693861
and parameters: {'learning_rate': 0.30646113952574655, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2603292150617242, 'subsample':
0.8825842617267338}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:20,663] Trial 256 finished with value: 0.01043178005502966
and parameters: {'learning_rate': 0.31939069124568326, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26429722495424174, 'subsample':
0.8823411371543795}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:22,398] Trial 257 finished with value: 0.008831875396788542
and parameters: {'learning_rate': 0.2671019989999028, 'max_depth': 10,

'n_estimators': 666, 'reg_lambda': 0.2622983467666069, 'subsample':
0.8829093306756803}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:24,011] Trial 258 finished with value: 0.009338780000118816
and parameters: {'learning_rate': 0.26327008653943773, 'max_depth': 9,
'n_estimators': 676, 'reg_lambda': 0.2650392537331055, 'subsample':
0.8817203933289652}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:24,470] Trial 259 finished with value: 0.00887299941483411
and parameters: {'learning_rate': 0.26179156656150215, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2697638010950682, 'subsample':
0.882482455274019}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:24,926] Trial 260 finished with value: 0.008859160626810653
and parameters: {'learning_rate': 0.2661189464857515, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2675707632941665, 'subsample':
0.8826433689514234}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:25,402] Trial 261 finished with value: 0.009188843178649783
and parameters: {'learning_rate': 0.26884800411309007, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2629676941734632, 'subsample':
0.8827917772917687}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:25,875] Trial 262 finished with value: 0.008999174876689218
and parameters: {'learning_rate': 0.26428170747319163, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.26102004204046725, 'subsample':
0.8825209217854452}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:26,352] Trial 263 finished with value: 0.008912234195270579
and parameters: {'learning_rate': 0.2730141877232763, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2575529717341932, 'subsample':
0.8818327431233585}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:26,806] Trial 264 finished with value: 0.008232857315770514
and parameters: {'learning_rate': 0.26549442120797456, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.26626893043345634, 'subsample':
0.8823508843588859}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:27,304] Trial 265 finished with value: 0.007951241923222949
and parameters: {'learning_rate': 0.2653005831177597, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.26636125203204586, 'subsample':
0.882145533767943}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:27,763] Trial 266 finished with value: 0.007297218858131105
and parameters: {'learning_rate': 0.2651311609620577, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2659390785251536, 'subsample':
0.8820880612762021}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:28,253] Trial 267 finished with value: 0.008896922361605579
and parameters: {'learning_rate': 0.2648589859478861, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2684774087853374, 'subsample':
0.8820530227031331}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:28,703] Trial 268 finished with value: 0.009459647377459883
and parameters: {'learning_rate': 0.26322302094378003, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.27298644619205026, 'subsample':
0.882168125752111}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:29,176] Trial 269 finished with value: 0.01027984205437696
and parameters: {'learning_rate': 0.2856597708638008, 'max_depth': 10,

'n_estimators': 668, 'reg_lambda': 0.266043377454732, 'subsample':
0.8821071063167295}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:29,622] Trial 270 finished with value: 0.008004970964957097
and parameters: {'learning_rate': 0.26554649597128244, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2700489569269729, 'subsample':
0.8822912174392185}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:30,125] Trial 271 finished with value: 0.009008508254313204
and parameters: {'learning_rate': 0.26478000029443854, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2698203205687195, 'subsample':
0.8822942747920792}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:30,615] Trial 272 finished with value: 0.010055789500736068
and parameters: {'learning_rate': 0.2657970023936615, 'max_depth': 11,
'n_estimators': 683, 'reg_lambda': 0.2722376707324697, 'subsample':
0.8819699790324553}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:31,199] Trial 273 finished with value: 0.009280907397687721
and parameters: {'learning_rate': 0.26254315387792576, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.27099002158767493, 'subsample':
0.8821460316420534}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:31,672] Trial 274 finished with value: 0.008884905297708303
and parameters: {'learning_rate': 0.2639686305930497, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26729714533471044, 'subsample':
0.8822619897193055}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:32,174] Trial 275 finished with value: 0.007846122841554825
and parameters: {'learning_rate': 0.2661174138619523, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2648400554008173, 'subsample':
0.8820165699114697}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:32,661] Trial 276 finished with value: 0.008690557240462889
and parameters: {'learning_rate': 0.26601748329345953, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.2649381880677094, 'subsample':
0.8818858808943658}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:33,166] Trial 277 finished with value: 0.00909326362135025
and parameters: {'learning_rate': 0.2642521138864169, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.26879270980240194, 'subsample':
0.8820692359168437}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:33,739] Trial 278 finished with value: 0.009195527228614586
and parameters: {'learning_rate': 0.26694073076193964, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26638601439329607, 'subsample':
0.8819257853189999}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:35,580] Trial 279 finished with value: 0.00958454360829046
and parameters: {'learning_rate': 0.26219559824805166, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26465744153424003, 'subsample':
0.8823150658290267}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:38,547] Trial 280 finished with value: 0.0072721406289042055
and parameters: {'learning_rate': 0.26542347415690665, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2678424402494028, 'subsample':
0.8817430772434182}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:39,084] Trial 281 finished with value: 0.009065199206859035
and parameters: {'learning_rate': 0.2650239920217565, 'max_depth': 10,

'n_estimators': 681, 'reg_lambda': 0.26878507363560716, 'subsample':
0.8816153969855359}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:39,553] Trial 282 finished with value: 0.00846264991308785
and parameters: {'learning_rate': 0.26390522011378054, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2675553213216018, 'subsample':
0.8817950709028053}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:39,974] Trial 283 finished with value: 0.010240235520090301
and parameters: {'learning_rate': 0.2818823366223333, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.2697382549908584, 'subsample':
0.882002835258611}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:40,431] Trial 284 finished with value: 0.009087796202098907
and parameters: {'learning_rate': 0.26582595692272526, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.266181058283554, 'subsample':
0.8816561022001463}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:40,888] Trial 285 finished with value: 0.009351274958125 28
and parameters: {'learning_rate': 0.26092516338587257, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.27103175478137664, 'subsample':
0.8818819738009391}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:41,360] Trial 286 finished with value: 0.008751836886508466
and parameters: {'learning_rate': 0.2631916193251451, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2678391195635282, 'subsample':
0.882161010361393}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:41,822] Trial 287 finished with value: 0.007707736698077873
and parameters: {'learning_rate': 0.2653616832092465, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26413665347081167, 'subsample':
0.881725076326423}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:42,293] Trial 288 finished with value: 0.008590398388687427
and parameters: {'learning_rate': 0.2650020972462029, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2658278917720172, 'subsample':
0.8817077143218482}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:42,791] Trial 289 finished with value: 0.009514131606428 79
and parameters: {'learning_rate': 0.26620956278018015, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.264031103216206, 'subsample':
0.8814574417699684}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:43,287] Trial 290 finished with value: 0.008319616710038757
and parameters: {'learning_rate': 0.2634675388196493, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26800963738934097, 'subsample':
0.8817657495204156}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:43,756] Trial 291 finished with value: 0.008755027760588698
and parameters: {'learning_rate': 0.26485519361774695, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2652797232326545, 'subsample':
0.8818884100136678}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:44,215] Trial 292 finished with value: 0.009706839172189796
and parameters: {'learning_rate': 0.2618952968440335, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2702425175450652, 'subsample':
0.8815605603634724}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:44,667] Trial 293 finished with value: 0.011363086282852578
and parameters: {'learning_rate': 0.28934819008639734, 'max_depth': 10,

'n_estimators': 678, 'reg_lambda': 0.26666477873819827, 'subsample':
0.8820754316955884}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:45,133] Trial 294 finished with value: 0.009379084788343135
and parameters: {'learning_rate': 0.2668210846733625, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.26461924160431016, 'subsample':
0.8814147369832427}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:45,602] Trial 295 finished with value: 0.008339504176022606
and parameters: {'learning_rate': 0.2655643377544841, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2687785053283762, 'subsample':
0.8822024943624899}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:46,098] Trial 296 finished with value: 0.00881620406241778
and parameters: {'learning_rate': 0.263942788847074, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26320853763788105, 'subsample':
0.8819776052586892}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:46,566] Trial 297 finished with value: 0.00950548183584911
and parameters: {'learning_rate': 0.26684018117048863, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.26659453717385023, 'subsample':
0.8817990569635538}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:47,064] Trial 298 finished with value: 0.009746985763948847
and parameters: {'learning_rate': 0.2644438123177914, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.27068926661932025, 'subsample':
0.8816391895958415}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:47,522] Trial 299 finished with value: 0.008707704158885533
and parameters: {'learning_rate': 0.26262077627559355, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.26483569111343164, 'subsample':
0.8823069633764384}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:48,005] Trial 300 finished with value: 0.008891999255437015
and parameters: {'learning_rate': 0.2659000437591229, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.21468353201857626, 'subsample':
0.8820476941806041}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:48,464] Trial 301 finished with value: 0.009994542945970972
and parameters: {'learning_rate': 0.2992560151632154, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26802801444214164, 'subsample':
0.8822109571463804}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:49,327] Trial 302 finished with value: 0.00850100126596847
and parameters: {'learning_rate': 0.26730504900422675, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.263408321148128, 'subsample':
0.8815276689173417}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:51,195] Trial 303 finished with value: 0.009573113452022209
and parameters: {'learning_rate': 0.29179834585078923, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2524812225418664, 'subsample':
0.8812493292435986}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:53,782] Trial 304 finished with value: 0.007697024247920432
and parameters: {'learning_rate': 0.2651568692373499, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.26664069896963494, 'subsample':
0.8817232359323645}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:54,290] Trial 305 finished with value: 0.008275249559457812
and parameters: {'learning_rate': 0.2633126244896821, 'max_depth': 10,

'n_estimators': 667, 'reg_lambda': 0.27337878295472484, 'subsample':
0.8817247541046415}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:54,757] Trial 306 finished with value: 0.008885259816566113
and parameters: {'learning_rate': 0.26462736364753425, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.261969850645698, 'subsample':
0.8818884671981879}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:55,257] Trial 307 finished with value: 0.008779792595238724
and parameters: {'learning_rate': 0.26761805456384247, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.26897881540275725, 'subsample':
0.8813586901370344}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:55,712] Trial 308 finished with value: 0.008336560785075418
and parameters: {'learning_rate': 0.26628537559779364, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.2671757474571183, 'subsample':
0.8816472761260341}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:56,219] Trial 309 finished with value: 0.009569811196555996
and parameters: {'learning_rate': 0.26404663006473716, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.271725325291559, 'subsample':
0.8818279697015939}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:56,701] Trial 310 finished with value: 0.00967137567045678
and parameters: {'learning_rate': 0.2609565208736291, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2650775046213565, 'subsample':
0.881542739631251}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:57,185] Trial 311 finished with value: 0.008078144055667936
and parameters: {'learning_rate': 0.26532025490666117, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2631541228810864, 'subsample':
0.8819901741114698}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:57,644] Trial 312 finished with value: 0.0077669707810166825
and parameters: {'learning_rate': 0.26523518567611193, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.26169368734993187, 'subsample':
0.8819783808378557}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:58,089] Trial 313 finished with value: 0.009284147985961931
and parameters: {'learning_rate': 0.2653027260290623, 'max_depth': 9,
'n_estimators': 673, 'reg_lambda': 0.2607954716405481, 'subsample':
0.8819883618739383}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:58,579] Trial 314 finished with value: 0.009927388201746932
and parameters: {'learning_rate': 0.2623187746136702, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2624612928561939, 'subsample':
0.8819720246025541}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:59,029] Trial 315 finished with value: 0.007518798750069728
and parameters: {'learning_rate': 0.2634157575639005, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2614726070016238, 'subsample':
0.881779609515855}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:59,526] Trial 316 finished with value: 0.008861975255408838
and parameters: {'learning_rate': 0.2633604921345901, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.26345206200218435, 'subsample':
0.8818259020981603}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:00:59,964] Trial 317 finished with value: 0.008874581412633604
and parameters: {'learning_rate': 0.2673065308681553, 'max_depth': 10,

'n_estimators': 675, 'reg_lambda': 0.2613121953067495, 'subsample':
0.8817342643296153}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:00,461] Trial 318 finished with value: 0.009002857084413656
and parameters: {'learning_rate': 0.2650417446135879, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26350841606271286, 'subsample':
0.8820449599657404}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:00,897] Trial 319 finished with value: 0.008531939951251148
and parameters: {'learning_rate': 0.26622658534305815, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2617005345940187, 'subsample':
0.8821494008506651}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:01,481] Trial 320 finished with value: 0.009864572307070406
and parameters: {'learning_rate': 0.26167879286091683, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2641251949744381, 'subsample':
0.8817178279744045}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:01,931] Trial 321 finished with value: 0.008665943714233787
and parameters: {'learning_rate': 0.26423378027174493, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26605492423153, 'subsample':
0.88189045778594}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:02,404] Trial 322 finished with value: 0.007962305885682796
and parameters: {'learning_rate': 0.2657112999860345, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2698561555376549, 'subsample':
0.8819223504082038}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:02,860] Trial 323 finished with value: 0.008115009647175687
and parameters: {'learning_rate': 0.26565161323291014, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.2707212934325717, 'subsample':
0.8819551715593726}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:03,328] Trial 324 finished with value: 0.009225147381677063
and parameters: {'learning_rate': 0.2601004047497899, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2693791989837934, 'subsample':
0.8818397502797591}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:04,120] Trial 325 finished with value: 0.009050623139610385
and parameters: {'learning_rate': 0.26309206023213844, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2724014495746998, 'subsample':
0.8820953393290213}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:06,041] Trial 326 finished with value: 0.00879937556384559
and parameters: {'learning_rate': 0.2671258723996732, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2675412870207155, 'subsample':
0.8817464089698157}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:08,739] Trial 327 finished with value: 0.008460932692173828
and parameters: {'learning_rate': 0.26445910993358657, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.269385543497069, 'subsample':
0.8819398156788963}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:09,201] Trial 328 finished with value: 0.008408443927519951
and parameters: {'learning_rate': 0.265894604490495, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2652667493821955, 'subsample':
0.8821256027876458}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:09,686] Trial 329 finished with value: 0.009035998034696598
and parameters: {'learning_rate': 0.26496697935657987, 'max_depth': 10,

'n_estimators': 676, 'reg_lambda': 0.2679176061406565, 'subsample':
0.882045578401381}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:10,171] Trial 330 finished with value: 0.009276964146063467
and parameters: {'learning_rate': 0.26263389279307275, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.27092342822255344, 'subsample':
0.8816206032793225}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:10,640] Trial 331 finished with value: 0.009403243276387821
and parameters: {'learning_rate': 0.26756765834271035, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2666605504779874, 'subsample':
0.8851760345278082}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:11,145] Trial 332 finished with value: 0.008764988164048965
and parameters: {'learning_rate': 0.2661096566577591, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.26408040605447003, 'subsample':
0.8818159551555681}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:11,618] Trial 333 finished with value: 0.008844354395278937
and parameters: {'learning_rate': 0.26372411097019105, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2690238637323117, 'subsample':
0.8822277466371223}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:12,143] Trial 334 finished with value: 0.00810029159605961
and parameters: {'learning_rate': 0.26506989712684575, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.26339958862399265, 'subsample':
0.8819634896028666}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:12,618] Trial 335 finished with value: 0.008411450286004367
and parameters: {'learning_rate': 0.2666000923998727, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26558277131990093, 'subsample':
0.8816659781551637}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:13,123] Trial 336 finished with value: 0.008734032155913552
and parameters: {'learning_rate': 0.2679804177377893, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2675457100546802, 'subsample':
0.8822247673757341}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:13,619] Trial 337 finished with value: 0.008867731824598584
and parameters: {'learning_rate': 0.2621494113731014, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.26206683563923944, 'subsample':
0.8818550702288092}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:14,132] Trial 338 finished with value: 0.009384425317719821
and parameters: {'learning_rate': 0.26377456884599826, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.27344462020862, 'subsample':
0.8821060652927606}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:14,617] Trial 339 finished with value: 0.00821388952255275
and parameters: {'learning_rate': 0.26527068384426333, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2701127892443767, 'subsample':
0.8823408996645755}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:15,098] Trial 340 finished with value: 0.00809805013938854
and parameters: {'learning_rate': 0.26624964254346345, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2652072339010232, 'subsample':
0.8817482287817887}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:15,542] Trial 341 finished with value: 0.010201386330560636
and parameters: {'learning_rate': 0.30288230632759705, 'max_depth': 10,

'n_estimators': 672, 'reg_lambda': 0.26752695872195525, 'subsample':
0.8815755441532342}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:16,056] Trial 342 finished with value: 0.00932983765636225
and parameters: {'learning_rate': 0.26428943962380325, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2717972310620246, 'subsample':
0.8820110937213341}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:16,554] Trial 343 finished with value: 0.010631840670118718
and parameters: {'learning_rate': 0.2678121089287521, 'max_depth': 11,
'n_estimators': 675, 'reg_lambda': 0.2625735840526179, 'subsample':
0.8814905649080924}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:17,118] Trial 344 finished with value: 0.008579200738192847
and parameters: {'learning_rate': 0.2629920375612474, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.26005828744812415, 'subsample':
0.8822499442881371}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:17,649] Trial 345 finished with value: 0.009097074490178346
and parameters: {'learning_rate': 0.2667684978175016, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2641830337805687, 'subsample':
0.881870028761604}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:18,184] Trial 346 finished with value: 0.008115771685693576
and parameters: {'learning_rate': 0.2651953372643261, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2688581953966443, 'subsample':
0.8821321503072167}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:18,951] Trial 347 finished with value: 0.009310974307897221
and parameters: {'learning_rate': 0.2614663946776337, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2663443043638834, 'subsample':
0.8823839328961094}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:21,908] Trial 348 finished with value: 0.00878570498412245
and parameters: {'learning_rate': 0.2640154426808616, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.2562793728456207, 'subsample':
0.8819069095559723}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:23,933] Trial 349 finished with value: 0.008425908461175852
and parameters: {'learning_rate': 0.26599789809614865, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26255126230117065, 'subsample':
0.881705724199549}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:24,560] Trial 350 finished with value: 0.00853106730976721
and parameters: {'learning_rate': 0.2678240115433983, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2608554949452624, 'subsample':
0.882005470548575}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:25,029] Trial 351 finished with value: 0.00999064722080182
and parameters: {'learning_rate': 0.2761684155582378, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.26458432657022296, 'subsample':
0.8822009012227524}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:25,575] Trial 352 finished with value: 0.009142508392033628
and parameters: {'learning_rate': 0.264698746040173, 'max_depth': 10,
'n_estimators': 694, 'reg_lambda': 0.2666328570658597, 'subsample':
0.8818071859952201}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:26,071] Trial 353 finished with value: 0.009356531972163781
and parameters: {'learning_rate': 0.26277099846214125, 'max_depth': 10,

'n_estimators': 676, 'reg_lambda': 0.26843630269371965, 'subsample':
0.8822801789081758}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:26,588] Trial 354 finished with value: 0.008964854091532951
and parameters: {'learning_rate': 0.26660605245971625, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2702490625299124, 'subsample':
0.8823738782751164}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:27,050] Trial 355 finished with value: 0.007941306627773984
and parameters: {'learning_rate': 0.2652316101555543, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2582548692486041, 'subsample':
0.8815895511756242}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:27,549] Trial 356 finished with value: 0.009476421726478574
and parameters: {'learning_rate': 0.26353737734493726, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.26718470632644914, 'subsample':
0.8814419076692129}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:28,011] Trial 357 finished with value: 0.00790744930802265
and parameters: {'learning_rate': 0.26487099446269846, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2578813236320949, 'subsample':
0.88153494443756}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:28,491] Trial 358 finished with value: 0.009760687189081416
and parameters: {'learning_rate': 0.26415437362000604, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2546457190067887, 'subsample':
0.8815455100885207}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:28,989] Trial 359 finished with value: 0.008638744025200141
and parameters: {'learning_rate': 0.26250642616947717, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2577975875785064, 'subsample':
0.8816211163990285}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:29,466] Trial 360 finished with value: 0.009362415609976514
and parameters: {'learning_rate': 0.2650937420771088, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.25704596781579747, 'subsample':
0.8814561399917502}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:29,949] Trial 361 finished with value: 0.009863266589755547
and parameters: {'learning_rate': 0.261331800252604, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.25554197748880425, 'subsample':
0.8813303957331271}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:30,427] Trial 362 finished with value: 0.008581065701072452
and parameters: {'learning_rate': 0.2634070164384545, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2574350552633632, 'subsample':
0.8815908333998668}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:30,921] Trial 363 finished with value: 0.008699340448558066
and parameters: {'learning_rate': 0.2659518391247625, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.2578236922522172, 'subsample':
0.881717149031287 7}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:31,381] Trial 364 finished with value: 0.009660696301868889
and parameters: {'learning_rate': 0.26496014965196046, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2534041208427234, 'subsample':
0.8814386080720279}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:31,906] Trial 365 finished with value: 0.008635411812709621
and parameters: {'learning_rate': 0.26418541942149054, 'max_depth': 10,

'n_estimators': 683, 'reg_lambda': 0.25918009691485283, 'subsample':
0.8816050073634182}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:32,388] Trial 366 finished with value: 0.009061901155304676
and parameters: {'learning_rate': 0.26661907773309823, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2556566024603487, 'subsample':
0.8817288772380109}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:32,925] Trial 367 finished with value: 0.009397255868005387
and parameters: {'learning_rate': 0.2622455305557572, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.2723980036130698, 'subsample':
0.8817966841841346}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:33,418] Trial 368 finished with value: 0.00906768875358115
and parameters: {'learning_rate': 0.2657311719896653, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2695922703471775, 'subsample':
0.8813484696390533}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:34,022] Trial 369 finished with value: 0.009041233241970644
and parameters: {'learning_rate': 0.2683359845374194, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.2589780668309324, 'subsample':
0.881540880375412}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:35,326] Trial 370 finished with value: 0.007618571938928076
and parameters: {'learning_rate': 0.26358148122855174, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26563108903026506, 'subsample':
0.8816253896192997}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:37,285] Trial 371 finished with value: 0.009014380214511033
and parameters: {'learning_rate': 0.2634674375101485, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2658474101424021, 'subsample':
0.8816552846138913}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:39,398] Trial 372 finished with value: 0.010137290757826977
and parameters: {'learning_rate': 0.26175146679475825, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2646632113703716, 'subsample':
0.8815020632510913}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:39,841] Trial 373 finished with value: 0.008357440573789423
and parameters: {'learning_rate': 0.26451649631450985, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26036978224445123, 'subsample':
0.8818380777081357}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:40,493] Trial 374 finished with value: 0.00917396195842797
and parameters: {'learning_rate': 0.26002576799789934, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2658604151254485, 'subsample':
0.8817156103459092}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:40,980] Trial 375 finished with value: 0.009259457023813715
and parameters: {'learning_rate': 0.2629021151207299, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.2679582889537106, 'subsample':
0.8811973431583685}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:41,491] Trial 376 finished with value: 0.008364408252442007
and parameters: {'learning_rate': 0.26685498652948814, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.26376790987936255, 'subsample':
0.88157548218314}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:41,992] Trial 377 finished with value: 0.009216529936229899
and parameters: {'learning_rate': 0.2648443239816971, 'max_depth': 10,

'n_estimators': 682, 'reg_lambda': 0.25874385530340804, 'subsample':
0.8814109455511098}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:42,497] Trial 378 finished with value: 0.00769052899441816
and parameters: {'learning_rate': 0.26360880207476023, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.26219381309261747, 'subsample':
0.8817853759767813}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:42,951] Trial 379 finished with value: 0.007585608810724786
and parameters: {'learning_rate': 0.2655218065599522, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2609660187069225, 'subsample':
0.8819383663823479}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:43,487] Trial 380 finished with value: 0.008049202011074185
and parameters: {'learning_rate': 0.26378907159016124, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.26096213904191584, 'subsample':
0.8818978376799563}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:43,973] Trial 381 finished with value: 0.009382188568882755
and parameters: {'learning_rate': 0.26588168155662495, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.26011930081305, 'subsample':
0.8820439230950675}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:44,505] Trial 382 finished with value: 0.008200148060012234
and parameters: {'learning_rate': 0.2647215077553611, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.2567228605860298, 'subsample':
0.8818318963557821}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:45,011] Trial 383 finished with value: 0.008869835532905258
and parameters: {'learning_rate': 0.2625347568298943, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.2621831284209263, 'subsample':
0.8821059846354269}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:45,611] Trial 384 finished with value: 0.008028719065075221
and parameters: {'learning_rate': 0.2666679449287407, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.258244779011516, 'subsample':
0.8819300851538573}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:46,094] Trial 385 finished with value: 0.007904740994798458
and parameters: {'learning_rate': 0.2635447349395274, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.26165209947951756, 'subsample':
0.8817718295100815}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:46,588] Trial 386 finished with value: 0.009012887580359268
and parameters: {'learning_rate': 0.2618256834980347, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.2605642613831998, 'subsample':
0.8817400055574631}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:47,041] Trial 387 finished with value: 0.009367178422891729
and parameters: {'learning_rate': 0.26333856763055574, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2590190146531257, 'subsample':
0.8819044140655986}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:47,560] Trial 388 finished with value: 0.009280885438792583
and parameters: {'learning_rate': 0.26434361884079677, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.2620904869723667, 'subsample':
0.8818299009643851}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:48,068] Trial 389 finished with value: 0.008821176379253065
and parameters: {'learning_rate': 0.2611615040165675, 'max_depth': 10,

'n_estimators': 681, 'reg_lambda': 0.2600184396956363, 'subsample':
0.8817132783732952}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:48,609] Trial 390 finished with value: 0.007844865419451981
and parameters: {'learning_rate': 0.26321722830273614, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2549710686870032, 'subsample':
0.8820180780816164}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:49,151] Trial 391 finished with value: 0.008688143179781315
and parameters: {'learning_rate': 0.26256659951628186, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.2552973951532687, 'subsample':
0.8820081545242346}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:50,827] Trial 392 finished with value: 0.008835408238077295
and parameters: {'learning_rate': 0.263183238108067, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.2569140504159818, 'subsample':
0.8819220543760917}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:52,684] Trial 393 finished with value: 0.008503782248741565
and parameters: {'learning_rate': 0.2614643049729892, 'max_depth': 10,
'n_estimators': 662, 'reg_lambda': 0.25338793649385644, 'subsample':
0.8817841652681028}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:54,653] Trial 394 finished with value: 0.008935553421074242
and parameters: {'learning_rate': 0.2639869553079052, 'max_depth': 10,
'n_estimators': 663, 'reg_lambda': 0.25819571516165696, 'subsample':
0.8816676216797905}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:55,122] Trial 395 finished with value: 0.010110047840045162
and parameters: {'learning_rate': 0.31162386340210224, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2544646982926698, 'subsample':
0.8820246686818544}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:55,592] Trial 396 finished with value: 0.007706786373435282
and parameters: {'learning_rate': 0.2628655122464465, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2557981151511407, 'subsample':
0.8821095162992658}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:56,091] Trial 397 finished with value: 0.008365620425411214
and parameters: {'learning_rate': 0.2620845908766828, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2560170453816647, 'subsample':
0.8819275389458183}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:56,566] Trial 398 finished with value: 0.009165291204930944
and parameters: {'learning_rate': 0.26077087041503044, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2537782058675253, 'subsample':
0.8821149356124275}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:57,078] Trial 399 finished with value: 0.008616069638239396
and parameters: {'learning_rate': 0.26311377284463755, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.2517591278954793, 'subsample':
0.8820977068625065}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:57,535] Trial 400 finished with value: 0.009056311801568627
and parameters: {'learning_rate': 0.26399985893180133, 'max_depth': 10,
'n_estimators': 667, 'reg_lambda': 0.2559012802494449, 'subsample':
0.8817957219666939}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:58,020] Trial 401 finished with value: 0.01069221331564549
and parameters: {'learning_rate': 0.262342893786645, 'max_depth': 9,

'n_estimators': 663, 'reg_lambda': 0.25756010568625604, 'subsample':
0.8819467772236169}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:58,476] Trial 402 finished with value: 0.00909174068475735
and parameters: {'learning_rate': 0.2648896724433789, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.259105625650427, 'subsample':
0.8816694736246781}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:58,936] Trial 403 finished with value: 0.00930922104397037
and parameters: {'learning_rate': 0.26331367282134177, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.2612918592431547, 'subsample':
0.8821375080093857}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:59,434] Trial 404 finished with value: 0.010084746207587657
and parameters: {'learning_rate': 0.2607823450405369, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2557410294241099, 'subsample':
0.8859344047598284}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:01:59,877] Trial 405 finished with value: 0.008601836492217 62
and parameters: {'learning_rate': 0.2655854513917127, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.25770806830998444, 'subsample':
0.8818213184547997}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:00,388] Trial 406 finished with value: 0.008385181797629947
and parameters: {'learning_rate': 0.2644610614774152, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2544701513434227, 'subsample':
0.8820304503326842}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:00,876] Trial 407 finished with value: 0.007619422311209751
and parameters: {'learning_rate': 0.26688408104881084, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.25954988241371946, 'subsample':
0.8819578195175289}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:01,380] Trial 408 finished with value: 0.009135609052254183
and parameters: {'learning_rate': 0.26738098147136774, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.25874854891135024, 'subsample':
0.8816571612374039}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:01,883] Trial 409 finished with value: 0.008773290613902805
and parameters: {'learning_rate': 0.26672539651624294, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.26013488496133413, 'subsample':
0.8821730547678293}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:02,370] Trial 410 finished with value: 0.008401053971689143
and parameters: {'learning_rate': 0.26232696192607796, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2613442083096964, 'subsample':
0.8820380274616959}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:02,818] Trial 411 finished with value: 0.009187974443382374
and parameters: {'learning_rate': 0.26396179153707766, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2629511308552244, 'subsample':
0.8817748316198513}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:03,312] Trial 412 finished with value: 0.009161300467960942
and parameters: {'learning_rate': 0.2678743880834015, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.25719556808058236, 'subsample':
0.8815532355454527}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:03,793] Trial 413 finished with value: 0.009018047005852332
and parameters: {'learning_rate': 0.2659776137206782, 'max_depth': 10,

'n_estimators': 680, 'reg_lambda': 0.2589742772380164, 'subsample':
0.8819148545031421}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:04,302] Trial 414 finished with value: 0.008200498113904938
and parameters: {'learning_rate': 0.26465238353834886, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2610058135847889, 'subsample':
0.8821494011326191}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:05,901] Trial 415 finished with value: 0.008282222343362674
and parameters: {'learning_rate': 0.2630588997343748, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.26296932398060974, 'subsample':
0.8851900892376156}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:07,809] Trial 416 finished with value: 0.008207707605574132
and parameters: {'learning_rate': 0.2669162166564447, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2597261130138395, 'subsample':
0.8816494398089477}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:09,442] Trial 417 finished with value: 0.00836960221739319
and parameters: {'learning_rate': 0.26175804827292826, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2516455842879236, 'subsample':
0.881840843803485}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:11,261] Trial 418 finished with value: 0.008467798391505112
and parameters: {'learning_rate': 0.2652609956271897, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.256953900603014, 'subsample':
0.8820230925556306}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:12,904] Trial 419 finished with value: 0.008520393068807178
and parameters: {'learning_rate': 0.2634912498704859, 'max_depth': 10,
'n_estimators': 687, 'reg_lambda': 0.26430771695540056, 'subsample':
0.883398398315365}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:13,709] Trial 420 finished with value: 0.00903532777747373
and parameters: {'learning_rate': 0.2601566098288336, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.263019852658905, 'subsample':
0.8817859887078341}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:14,215] Trial 421 finished with value: 0.008507841425815219
and parameters: {'learning_rate': 0.2661026275656509, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.26133791501303616, 'subsample':
0.8822380148926429}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:14,688] Trial 422 finished with value: 0.008619091333226817
and parameters: {'learning_rate': 0.2647171641995586, 'max_depth': 10,
'n_estimators': 661, 'reg_lambda': 0.2596416436554413, 'subsample':
0.88191673799703}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:15,171] Trial 423 finished with value: 0.008920913562154178
and parameters: {'learning_rate': 0.26792232852199516, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.25471043690626666, 'subsample':
0.881629183349486}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:15,643] Trial 424 finished with value: 0.008966692592395232
and parameters: {'learning_rate': 0.26374718049271495, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2647498678782358, 'subsample':
0.881537576765478}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:16,133] Trial 425 finished with value: 0.008167314958453438
and parameters: {'learning_rate': 0.26670982853057246, 'max_depth': 10,

'n_estimators': 684, 'reg_lambda': 0.25648451701797703, 'subsample':
0.8820715969010411}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:16,577] Trial 426 finished with value: 0.009016732959999331
and parameters: {'learning_rate': 0.27805058886325135, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.26180086524210505, 'subsample':
0.8817197191278877}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:17,013] Trial 427 finished with value: 0.009693643231930676
and parameters: {'learning_rate': 0.28760850655519293, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.25852152915042853, 'subsample':
0.8822195816568021}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:17,507] Trial 428 finished with value: 0.00892203251746327
and parameters: {'learning_rate': 0.2623247586198997, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2648279215964802, 'subsample':
0.8819577180086904}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:17,987] Trial 429 finished with value: 0.008731301479275842
and parameters: {'learning_rate': 0.2649294671870875, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26252175212520323, 'subsample':
0.8814940879388313}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:18,508] Trial 430 finished with value: 0.009052126775887195
and parameters: {'learning_rate': 0.2656469259168848, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2599233924784263, 'subsample':
0.8818044341974463}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:18,950] Trial 431 finished with value: 0.009158392893025332
and parameters: {'learning_rate': 0.2632053638931644, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2577145202385155, 'subsample':
0.8820632783113543}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:19,429] Trial 432 finished with value: 0.009523443142999154
and parameters: {'learning_rate': 0.2643928277280213, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2637024620219542, 'subsample':
0.8817085704499972}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:19,877] Trial 433 finished with value: 0.008831582192757174
and parameters: {'learning_rate': 0.26850689011155016, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.26087194344792636, 'subsample':
0.8819226559442197}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:20,381] Trial 434 finished with value: 0.009145012407859473
and parameters: {'learning_rate': 0.2615228439122513, 'max_depth': 10,
'n_estimators': 685, 'reg_lambda': 0.2661298033356837, 'subsample':
0.8821739786782085}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:20,861] Trial 435 finished with value: 0.009149853645245258
and parameters: {'learning_rate': 0.26716117501193803, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.2649590786471639, 'subsample':
0.8818321328267595}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:21,411] Trial 436 finished with value: 0.010029446451104602
and parameters: {'learning_rate': 0.26582083571590764, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.25584725440501344, 'subsample':
0.8839519505014196}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:21,914] Trial 437 finished with value: 0.009127585269588767
and parameters: {'learning_rate': 0.2639707500683215, 'max_depth': 10,

'n_estimators': 667, 'reg_lambda': 0.262667592983803, 'subsample':
0.8816943218300461}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:22,458] Trial 438 finished with value: 0.011377248777407442
and parameters: {'learning_rate': 0.2628021074823296, 'max_depth': 11,
'n_estimators': 676, 'reg_lambda': 0.207902703411412, 'subsample':
0.8847255016029225}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:23,237] Trial 439 finished with value: 0.008611174670618334
and parameters: {'learning_rate': 0.26539399513838363, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.25837707354422995, 'subsample':
0.8820091830416936}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:24,639] Trial 440 finished with value: 0.008400800382669089
and parameters: {'learning_rate': 0.26699131051158637, 'max_depth': 10,
'n_estimators': 669, 'reg_lambda': 0.25282277939087444, 'subsample':
0.8841920150661385}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:26,389] Trial 441 finished with value: 0.009246323996513206
and parameters: {'learning_rate': 0.2644489470605292, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26585498329727136, 'subsample':
0.8815654126669845}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:27,791] Trial 442 finished with value: 0.00817626499589686
and parameters: {'learning_rate': 0.2683884386008701, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.26029072134533743, 'subsample':
0.8822485398571871}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:28,243] Trial 443 finished with value: 0.009063010510805014
and parameters: {'learning_rate': 0.26159264786238423, 'max_depth': 10,
'n_estimators': 663, 'reg_lambda': 0.2615375931862106, 'subsample':
0.8818757570224843}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:28,697] Trial 444 finished with value: 0.008908598902869493
and parameters: {'learning_rate': 0.266368245073003, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.26356095547809366, 'subsample':
0.8821046172234781}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:29,142] Trial 445 finished with value: 0.008092629346432319
and parameters: {'learning_rate': 0.2632808478422018, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2567207329099339, 'subsample':
0.8813818985524676}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:29,589] Trial 446 finished with value: 0.0087113155618998
and parameters: {'learning_rate': 0.26503231380009973, 'max_depth': 10,
'n_estimators': 665, 'reg_lambda': 0.2543633845995184, 'subsample':
0.8817513344381983}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:30,076] Trial 447 finished with value: 0.00828732743541296
and parameters: {'learning_rate': 0.2640478454210572, 'max_depth': 10,
'n_estimators': 683, 'reg_lambda': 0.2665454449087347, 'subsample':
0.8816142814285017}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:30,549] Trial 448 finished with value: 0.008881034883487982
and parameters: {'learning_rate': 0.2659948699187, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2590013136838375, 'subsample':
0.8819756624450998}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:31,011] Trial 449 finished with value: 0.009125707721738725
and parameters: {'learning_rate': 0.26257355226254964, 'max_depth': 10,

'n_estimators': 675, 'reg_lambda': 0.26471098219259065, 'subsample':
0.882315252292983}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:31,470] Trial 450 finished with value: 0.008552987915925691
and parameters: {'learning_rate': 0.2676052249328149, 'max_depth': 10,
'n_estimators': 668, 'reg_lambda': 0.2621123420000541, 'subsample':
0.8814668855390833}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:31,962] Trial 451 finished with value: 0.009143775447980425
and parameters: {'learning_rate': 0.2610950068254996, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2603895527990708, 'subsample':
0.8818243152854648}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:32,463] Trial 452 finished with value: 0.007716815018328687
and parameters: {'learning_rate': 0.2650211876909409, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.25758564274983303, 'subsample':
0.8821392245979667}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:32,939] Trial 453 finished with value: 0.008545091776073982
and parameters: {'learning_rate': 0.2640455783619054, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.25714536792585235, 'subsample':
0.8819835730848307}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:33,425] Trial 454 finished with value: 0.00983157648468105
and parameters: {'learning_rate': 0.2665549149294635, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2557363996347314, 'subsample':
0.8856052285829245}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:33,990] Trial 455 finished with value: 0.008486006098591035
and parameters: {'learning_rate': 0.26902239948990014, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2584415655209126, 'subsample':
0.8818752602207721}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:34,487] Trial 456 finished with value: 0.008614505849944897
and parameters: {'learning_rate': 0.26256348271291496, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2577201703908946, 'subsample':
0.8816788334166751}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:35,005] Trial 457 finished with value: 0.00885493385795119
and parameters: {'learning_rate': 0.26501527825637744, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.254961808730814, 'subsample':
0.8821777394442886}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:35,511] Trial 458 finished with value: 0.00931559528103569
and parameters: {'learning_rate': 0.2640901087824261, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.25890202932311823, 'subsample':
0.8820332117411104}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:36,011] Trial 459 finished with value: 0.010171868934895469
and parameters: {'learning_rate': 0.28070203299154445, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2601310189556762, 'subsample':
0.8815586432717285}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:36,478] Trial 460 finished with value: 0.009633185240533084
and parameters: {'learning_rate': 0.2658426457882396, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.24983280086334395, 'subsample':
0.8817535545827502}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:36,963] Trial 461 finished with value: 0.0083473557869704
and parameters: {'learning_rate': 0.2631973760889224, 'max_depth': 10,

'n_estimators': 674, 'reg_lambda': 0.2567221796115687, 'subsample':
0.8822725942304132}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:37,460] Trial 462 finished with value: 0.009065304367109483
and parameters: {'learning_rate': 0.26739068282304973, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.25399188028382064, 'subsample':
0.881918653683892}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:38,512] Trial 463 finished with value: 0.008116959545863887
and parameters: {'learning_rate': 0.26498345309643717, 'max_depth': 10,
'n_estimators': 684, 'reg_lambda': 0.2614709589580622, 'subsample':
0.8820977887994674}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:40,492] Trial 464 finished with value: 0.008549396910104312
and parameters: {'learning_rate': 0.262597385241143, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.2636135091163142, 'subsample':
0.8817963229903674}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:42,725] Trial 465 finished with value: 0.009679530204804722
and parameters: {'learning_rate': 0.2600383192093158, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.2595290819197158, 'subsample':
0.8816205485281395}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:43,171] Trial 466 finished with value: 0.009066380426843285
and parameters: {'learning_rate': 0.26688555755784277, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.2614605680128168, 'subsample':
0.881482178220997}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:43,653] Trial 467 finished with value: 0.00924933046175136
and parameters: {'learning_rate': 0.263824132550827, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.2581775694167866, 'subsample':
0.8819459121300556}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:44,101] Trial 468 finished with value: 0.008901541916973892
and parameters: {'learning_rate': 0.26849255923696175, 'max_depth': 10,
'n_estimators': 686, 'reg_lambda': 0.25598471306873055, 'subsample':
0.8823648128070299}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:44,591] Trial 469 finished with value: 0.009436616718096003
and parameters: {'learning_rate': 0.2615610094127786, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.26345320814751294, 'subsample':
0.8821788854836152}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:45,056] Trial 470 finished with value: 0.008866408423569236
and parameters: {'learning_rate': 0.26582816277502397, 'max_depth': 10,
'n_estimators': 634, 'reg_lambda': 0.26025096120378105, 'subsample':
0.8817655578353436}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:45,581] Trial 471 finished with value: 0.008848853650024874
and parameters: {'learning_rate': 0.2647311566264245, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2623637631019753, 'subsample':
0.8820545437268785}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:46,045] Trial 472 finished with value: 0.007693383050640422
and parameters: {'learning_rate': 0.2633772699320463, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2581062457400886, 'subsample':
0.8818633236088624}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:46,538] Trial 473 finished with value: 0.008918776538275752
and parameters: {'learning_rate': 0.2618668914979476, 'max_depth': 10,

'n_estimators': 678, 'reg_lambda': 0.25314591793258684, 'subsample':
0.881907362799}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:47,007] Trial 474 finished with value: 0.008857472673833628
and parameters: {'learning_rate': 0.2635903442594314, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.2650282075373759, 'subsample':
0.88207539630283}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:47,532] Trial 475 finished with value: 0.008595328068465708
and parameters: {'learning_rate': 0.2625662850351417, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2572084002182933, 'subsample':
0.8818713958514145}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:48,007] Trial 476 finished with value: 0.009317538793957518
and parameters: {'learning_rate': 0.26391511521877437, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.2667358921912075, 'subsample':
0.882293121415009}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:48,504] Trial 477 finished with value: 0.008346367303420863
and parameters: {'learning_rate': 0.263006857381845, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.259909961893446, 'subsample':
0.8819581927947541}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:48,975] Trial 478 finished with value: 0.00981775089329068
and parameters: {'learning_rate': 0.2612074094044388, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.2636847892263373, 'subsample':
0.8821691646485831}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:49,483] Trial 479 finished with value: 0.008674713081956829
and parameters: {'learning_rate': 0.2663996087439959, 'max_depth': 10,
'n_estimators': 676, 'reg_lambda': 0.26119777265740973, 'subsample':
0.881738152953893}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:49,938] Trial 480 finished with value: 0.008584897016144422
and parameters: {'learning_rate': 0.26497318903238953, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2561534134007867, 'subsample':
0.8824195580136337}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:50,429] Trial 481 finished with value: 0.008615958238700615
and parameters: {'learning_rate': 0.2674411483559619, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2651777196937993, 'subsample':
0.8818421332954709}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:50,927] Trial 482 finished with value: 0.009289828469195982
and parameters: {'learning_rate': 0.2634220681571501, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.25905338273621786, 'subsample':
0.8820456143546683}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:51,423] Trial 483 finished with value: 0.009393790409691752
and parameters: {'learning_rate': 0.2648774702788298, 'max_depth': 10,
'n_estimators': 662, 'reg_lambda': 0.26225969034168545, 'subsample':
0.8817054165928583}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:51,933] Trial 484 finished with value: 0.009293834434856067
and parameters: {'learning_rate': 0.26155042649006877, 'max_depth': 10,
'n_estimators': 673, 'reg_lambda': 0.25493425266174385, 'subsample':
0.8822271009252198}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:52,433] Trial 485 finished with value: 0.007983572732489333
and parameters: {'learning_rate': 0.26622428928224895, 'max_depth': 10,

'n_estimators': 676, 'reg_lambda': 0.26759682168350746, 'subsample':
0.8819903296162835}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:53,338] Trial 486 finished with value: 0.008695782133181812
and parameters: {'learning_rate': 0.26916368833818627, 'max_depth': 10,
'n_estimators': 666, 'reg_lambda': 0.263724930292683, 'subsample':
0.8818557791784478}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:55,569] Trial 487 finished with value: 0.01020974885892162
and parameters: {'learning_rate': 0.26394340480488304, 'max_depth': 9,
'n_estimators': 660, 'reg_lambda': 0.2579333761512084, 'subsample':
0.8821128158507489}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:56,800] Trial 488 finished with value: 0.0084725660241031
and parameters: {'learning_rate': 0.26235209876938337, 'max_depth': 10,
'n_estimators': 680, 'reg_lambda': 0.26107488522710826, 'subsample':
0.8816521173371216}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:58,044] Trial 489 finished with value: 0.008452944746035007
and parameters: {'learning_rate': 0.26569719207920234, 'max_depth': 10,
'n_estimators': 664, 'reg_lambda': 0.2663582046657308, 'subsample':
0.8823504194192373}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:58,468] Trial 490 finished with value: 0.009907530788088178
and parameters: {'learning_rate': 0.3155728680714976, 'max_depth': 10,
'n_estimators': 674, 'reg_lambda': 0.2625756588331571, 'subsample':
0.8818089750862333}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:58,925] Trial 491 finished with value: 0.008493471061946128
and parameters: {'learning_rate': 0.267480849676709, 'max_depth': 10,
'n_estimators': 681, 'reg_lambda': 0.26486174270471263, 'subsample':
0.8820205164990622}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:59,399] Trial 492 finished with value: 0.009485528087318151
and parameters: {'learning_rate': 0.26445857946673945, 'max_depth': 10,
'n_estimators': 677, 'reg_lambda': 0.25933818568832545, 'subsample':
0.8818875490475321}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:02:59,842] Trial 493 finished with value: 0.00859412218066166
and parameters: {'learning_rate': 0.2633602926320997, 'max_depth': 10,
'n_estimators': 671, 'reg_lambda': 0.2514317131555533, 'subsample':
0.8821859583811476}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:00,325] Trial 494 finished with value: 0.008214069486711677
and parameters: {'learning_rate': 0.2657168559360895, 'max_depth': 10,
'n_estimators': 675, 'reg_lambda': 0.26787499325937975, 'subsample':
0.8816992158074947}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:00,758] Trial 495 finished with value: 0.009856838780055284
and parameters: {'learning_rate': 0.30529063264940964, 'max_depth': 10,
'n_estimators': 672, 'reg_lambda': 0.25714716119834286, 'subsample':
0.8832188932881936}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:01,237] Trial 496 finished with value: 0.009803852223229648
and parameters: {'learning_rate': 0.2610959376292408, 'max_depth': 10,
'n_estimators': 678, 'reg_lambda': 0.2601998497889709, 'subsample':
0.883727019323771}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:01,705] Trial 497 finished with value: 0.008558832592678013
and parameters: {'learning_rate': 0.26809586235293814, 'max_depth': 10,

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'n_estimators': 667, 'reg_lambda': 0.2638690251546474, 'subsample':
0.8819860837363509}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:02,201] Trial 498 finished with value: 0.008580418351049193
and parameters: {'learning_rate': 0.2626579985189317, 'max_depth': 10,
'n_estimators': 682, 'reg_lambda': 0.2549296458512831, 'subsample':
0.8822744553657951}. Best is trial 239 with value: 0.007192987497682152.
[I 2024-08-30 20:03:02,733] Trial 499 finished with value: 0.008975742060850583
and parameters: {'learning_rate': 0.26462881144880385, 'max_depth': 10,
'n_estimators': 679, 'reg_lambda': 0.22001800854309736, 'subsample':
0.8818089577697078}. Best is trial 239 with value: 0.007192987497682152.

            i=5: {'learning_rate': 0.2648532944739505, 'max_depth': 10,
'n_estimators': 670, 'reg_lambda': 0.2577326000731398, 'subsample':
0.8825649768376913}
    MSE    i=5: 0.007192987497682152
[9284. 9035. 9152.] [8315.86766815 8130.94662476 8898.17530823] [0.1  0.1  0.03]
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