

random_forest_hyper_parameter

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```
In [1]: import numpy
        X = numpy.loadtxt("./data/Train/X_train.txt")
        y = numpy.loadtxt("./data/Train/y_train.txt")
```

```
In [2]: from models import random_forest
        best_model = random_forest.find_hyperparameter(X,y)
```

cross validation scores of best model are : [0.96983312 0.95565553 0.96203346 0.96518375 0.9644
mean of cross validation scores of best model is: 0.9634352290130191

```
In [4]: best_model.get_params()
```

```
Out[4]: {'bootstrap': True,
        'class_weight': None,
        'criterion': 'gini',
        'max_depth': 38,
        'max_features': 'auto',
        'max_leaf_nodes': None,
        'min_impurity_decrease': 0.0,
        'min_impurity_split': None,
        'min_samples_leaf': 1,
        'min_samples_split': 2,
        'min_weight_fraction_leaf': 0.0,
        'n_estimators': 213,
        'n_jobs': None,
        'oob_score': False,
        'random_state': None,
        'verbose': 0,
        'warm_start': False}
```