



UNIVERSIDADE
CATÓLICA
PORTUGUESA

BRAGA

Machine Learning

Session 11 - PL

Tree-Based Models – Part 1

Degree in Applied Data Science

2024/2025

Decision Trees in Scikit-Learn

- <https://scikit-learn.org/stable/modules/tree.html>

`sklearn.tree.DecisionTreeClassifier`

```
class sklearn.tree.DecisionTreeClassifier(*, criterion='gini', splitter='best', max_depth=None, min_samples_split=2,  
min_samples_leaf=1, min_weight_fraction_leaf=0.0, max_features=None, random_state=None, max_leaf_nodes=None,  
min_impurity_decrease=0.0, class_weight=None, ccp_alpha=0.0, monotonic_cst=None)
```

[\[source\]](#)

`sklearn.tree.DecisionTreeRegressor`

```
class sklearn.tree.DecisionTreeRegressor(*, criterion='squared_error', splitter='best', max_depth=None,  
min_samples_split=2, min_samples_leaf=1, min_weight_fraction_leaf=0.0, max_features=None, random_state=None,  
max_leaf_nodes=None, min_impurity_decrease=0.0, ccp_alpha=0.0, monotonic_cst=None)
```

[\[source\]](#)

Exercises:

- Notebooks on the github repository:
 - Notebook with examples:
 - `exercises/session11/examples.ipynb`
 - Notebook with exercises:
 - `exercises/session11/exercises.ipynb`