Decision Tree Implementation

Regression &
Classification

Types of Decision Tree

① ID3 ⟶ input features | target
categorical | classification

② C4.5 ⟶ input features | target

Categorical / | Classification
Continuous

③ CART ⟶ Classification & Regression
Tree

input features	target
Categorical / Continuous	Regression & Classification

⟶ Decision Tree Classifier

⟶ Decision Tree Regressor

Index(['fixed acidity', 'volatile acidity', 'citric acid', 'residual sugar',
    'chlorides', 'free sulfur dioxide', 'total sulfur dioxide', 'density',
    'pH', 'sulphates', 'alcohol'])

0   1   2   3
4   5   6   7
8   9   10

$n = 11$

$\longmapsto$ Continuous variables

$x(0) \quad x = 2.0$