



**Hyperparameter Tuning**

# Hyperparameters

- parameters of SL model that are not learned during training
- values are set before training begins
- Examples:
  - ▶  $K$  in KNN
  - ▶ the learning rate of a neural network
  - ▶ the depth and width of a decision tree
  - ▶ the regularization strength of a linear regression model
- uses performance metric (e.g. confusion matrix) obtained from cross-validation

# Hyperparameter Tuning

## Hyperparameters

- parameters of SL model that are not learned during training
- values are set before training begins
- Examples:
  - ▶  $K$  in KNN
  - ▶ the learning rate of a neural network
  - ▶ the depth and width of a decision tree
  - ▶ the regularization strength of a linear regression model
- uses performance metric (e.g. confusion matrix) obtained from cross-validation

# Hyperparameter Tuning

