

Section 1: Ensemble Methods for Regression and Classification

Now that you are done with the videos of section 1, let's assess your learning. Here, are a few questions, followed by 4 options, out of which 1 is the correct option. Select the right option and validate your learning! The answers are provided in a separate sheet

Q1. The core idea of this method is to fit a sequence of weak learners (models) and then in every iteration re-weight the samples of the training dataset:

- a. Random Forests
- b. AdaBoost
- c. Bagging
- d. Decision trees

Q2. The key idea of Ensemble Learning is:

- a. Build many models and compare them
- b. Combine the predictions of weak learners
- c. Produce many models and select the best
- d. Combine predictions from many individual predictors to improve performance

Q3. In principle any model can be used in Bagging

- a. TRUE
- b. FALSE

Q4. When using the class RandomForestClassifier from sklearn.ensemble, the parameter n_estimators corresponds to:

- a. Number of estimations in the model
- b. Number of trees in the forest
- c. Number of parameters to estimate
- d. Number of estimations in every iteration