

A few concepts to summarize lecture 6

CART: Classification and regression trees. A class of nonparametric methods based on partitioning the input space into regions and fitting a simple model for each region.

Recursive binary splitting: A greedy method for partitioning the input space into “boxes” aligned with the coordinate axes.

Gini index and deviance: Commonly used error measures for constructing classification trees.

Ensemble methods: Umbrella term for methods that average or combine multiple models.

Bagging: Bootstrap aggregating. An ensemble method based on the statistical bootstrap.

Random forests: Bagging of trees, combined with random feature selection for further variance reduction (and computational gains).