Bagging

Fitting a Random Forest Model

It is fairly straightforward to fit a Random Forest model in R. There are functions that handle most of the detail for you. However, to properly understand what these functions are doing, we are going to begin by fitting one manually. A plain-English algorithm for fitting a Random Forest is as follows:

1. Training
   a. Get a random sample of observations (with replacement) from the training data.
   b. Get a random sample of features (without replacement).
   c. Train a decision tree on the above.
   d. Repeat.

2. Predicting
   a. For a given set of feature values, predict the target using each tree previously trained.
   b. Average the predictions.