Master BeNeFri in Computer Science

Course: Statistical Learning Methods
Spring 2016

Exercise #7: Model evaluation

Recall the setting of Exercise #6.

1. Compare the two models (linear regression VS knn) for `Computer` dataset (filename: ComputerData.txt) as follows.

   a. Evaluate the quality of the fit (of the best model) between a single regression model of your choice and a multiple regression.

   b. Use knn regression to build the second model, applying LOO or 10-fold cross-validation.

   c. Compare the best model in (a) and the knn model you defined in (b).

      Which model do you prefer? Why? What is/are the advantage(s) of your choice? What about drawbacks?

2. Compare the two models (linear regression VS knn) for `Cars2` dataset (filename: Cars2Data.txt) as follows.

   d. Evaluate the quality of the fit (of the best model) between a single regression model of your choice and a multiple regression.

   e. Use knn regression to build the second model, applying LOO or 10-fold cross-validation.

   f. Compare the best model in (d) and the knn model you defined in (e).

      Which model do you prefer? Why? What is/are the advantage(s) of your choice? What about drawbacks?