EPPS6323 Knowledge Mining

Assignment 8

1. Lab10 in R
2. Review ISLR Chapters 7
3. Application exercise:

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1. Use the College dataset and perform polynomial regression to predict Acceptance using percentage of donating alumni. Use cross-validation to select the optimal degree d for the polynomial. What degree was chosen, and how does this compare to the results of hypothesis testing using ANOVA? Make a plot of the resulting polynomial fit to the data.

   甲、To start, try the following:

   ```
   attach(College)
   ```
   乙、names(College)
   丙、par(mfrow=c(1,1))
   丁、plot(perc.alumni, Accept)

2. Fit a step function to predict wage using Accept, and perform cross-validation to choose the optimal number of cuts. Make a plot of the fit obtained.