Topic 7.2: Model Selection Criteria

Read Section 10.1 of your textbook. As you read, take notes on the following.

1. What are the two conflicting objectives in building regression models?
2. Summarize, in your own words, some of the consequences of model misspecification.
3. Consider the following criteria for evaluating regression models:
   - Coefficient of multiple determination, R_p^2.
   - Adjusted R-squared, $R_{adj,p}^2$.
   - Residual mean square, $MS_{res}(p)$
   - Mallow's C_p.
   - AIC.
   - BIC.
   - PRESS statistic.

For each of the criteria, write out their formulas, and describe how you would use each of them to evaluate regression models.

n.js