3.4: Model Validation

Dr. Bean - Stat 5100

An extreme example of cross validation is leave one out cross validation (LOOCV), which is cross validation where only one observation is withheld on each iteration. Please describe the potential advantages and disadvantages of the LOOCV approach .

Suppose that you use cross validation as a means of selecting variables for your final regression model. What issues, if any, are there with reporting cross-validated error from the final model resulting from that selection process?

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What might be some reasons for selecting a final model that does NOT minimize the test or validation set error?

Our discussion of accuracy has revolved around squared errors $\left(Y - \hat{Y}\right)^2$. What are some other ways to measure error and why might we be interested in them?