Homework 6

MA 276, Skidmore College

Overview

In this assignment, we will not be using R (but feel free to write up your assignments in Markdown, anyways!) Read Brian Macdonald's article on expected goals and answer the following questions.

- 1. Brian uses ridge regression. Using Brian's description and these slides when is ridge regression preferred to traditional linear regression?
- 2. How does Brian split up games to do his reproducibility tests? What justification is given for this split?
- 3. In each of Figures (1) and (2), identify if higher or lower numbers reflect better model performance. How does OLS (ordinary least squares regression) outperform or underperform ridge regression? Or is it unclear?
- 4. Why does Brian hypothesize that hits and hits against are significant predictors of performance in hockey?
- 5. What is one explanation for why faceoff wins are not improving the predictions?