03/16/2017
Due May 3rd

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Project Proposal

STAT 4214
Regression Analysis
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The National Basketball Association (NBA) has an elite team in Washington D.C. named the Wizards. For the first time in 40 years they have a chance at a 50 win season, largely due to their offensive effectiveness. We will try to predict the number of points scored per game during the 2017 season using the following offensive predictors:

- Playing Home or Away (categorical)
- Number of assists (a pass within 3 seconds of a point being scored)
- Number of Rebounds (gaining possession of the ball after a shot is missed)
- Field goals attempted (how many shots from normal play attempted)
- Field goal percentage (number of shots made from normal play divided by the amount attempted)
- Number of Turnovers (When possession of the ball is changed from not a missed shot)
- Free Throw percentage (free throw score divided by the number attempted)
- Free Throws attempted (check for multicollinearity) (Number of shots from the foul line attempted)
- Offensive rating - a statistic which estimates points scored per 100 possessions
- Opponent's Conference (East vs. West)
- Overtime (yes or no) (Regular play has ended and continued into overtime)

At the end of the project there will be 82 observations or games played this season. This data will be obtained through box scores saved on basketball-reference.com.

Problem Context

Source of data

- We are getting our data from basketball-reference.com

Research Questions