## Anticipating NFL Wins for a Team

The objective is to anticipate wins by a NFL Football group based upon the accompanying criteria from the 2011-2013 seasons. The objective will be to test against the 2014 actual wins.

### Data source:

I downloaded the data NFL01103.csv from here: <http://www.pro-football-reference.com/>

**Exploratory Data analysis:**

I cleaned the data to clear missing data and data which was not not numeric data. For example a win or lose was converted to 0 and 1. As were home wins and loses.

Teams were given an ID in order to tie their data together over the course of 3 years.

Steps taken along:

1. Incorporating the opponent ID wherever necessary
2. What is training vs. testing set?
3. Figure out how to predict 2014 games.

**Categorical or Continuous:**

Following elements are categorical

Win since Won = 1 and Lose = 0

Home since Home = 1 and Away = 0

Following elements are continuous

OpponentID as the ID is 1-32 for the 32 teams.

Points\_Scored as these are the points scored by main Id HomeId

Opponents\_Score as points scored by OpponentID

Off\_1stD as Offensive first downs

Off\_PassY as Offensive passing yards

Off\_RushY as Offensive rushing yards

Off\_TO as Offensive turnovers

Def\_1stD as Defensive first downs allowed

Def\_TotYd as Defensive total yards allowed

Def\_PassY as passying yards allowed

Def\_RushY as Defensive rushing yards allowed

Def\_TO as Defensive turnovers taken away