

Section 1

The Data

The dataset contains 449,371 observations across 255 variables. Each variable represents information about a given play during an NFL football game. Each record represents a specific play during a given game. The data contain information on plays from the 2009- 2018 season.

The Story

NFL teams are always self-scouting. The best way to understand how to improve a team is to understand the strengths and opportunities based on game data and watching game film. The goal of this analysis is to identify strengths and derailers based on the detailed dataset in order to leverage data to win a division title, a conference title, and ultimately a Super Bowl.


The Audience

Coaches and players would likely benefit from this analysis. Teams study their opponents for tendencies and being able to identify those tendencies in order to account for them in a game is invaluable. If coaches and players go into a game armed with data on their own tendencies and the tendencies of successful teams, then the likelihood of success may increase.


Questions

1. What effect/correlation do penalties have on team performance?
2. Are passing teams or running teams more successful?
3. What side of the field yields the best chance for winning a game?
4. What are the passing and rushing trends?

Section 2



NFL Analytics



Tim Hulak
IST-719: Information Visualization

About the NFL
Audience = coaches

MAIN PLOT (Possibly map of team locations or donut chart of something like passing yards vs running yards)

About the Data
The dataset contains 449,371 observations across 255 variables. Each variable represents information about a given play during an NFL football game. Each record represents a specific play during a given game. The data contain information on plays from the 2009-2018 season.

What effects/correlation do Penalties have on team performance?

Are passing teams or running teams more successful?

What side of the field yields the best chance for winning a game?

Time Series Line Plot (What are the passing and rushing trends?)

Section 3



