



PREDICTING NFL PLAY CALLS

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Business Case



- The purpose of this project is to predict the type of play an NFL offense will run in a given situation
- The project aims to predict whether a play will be a run or pass given a dataset with various feature including defensive statistics

Business Value

- Obviously it would be a huge advantage to a NFL Defensive Coach if they were able to accurately predict whether the offense would be running or passing on their next play
- This advantage would enable the team to win more games, which in turn will bring in more fans for the team causing revenue to skyrocket

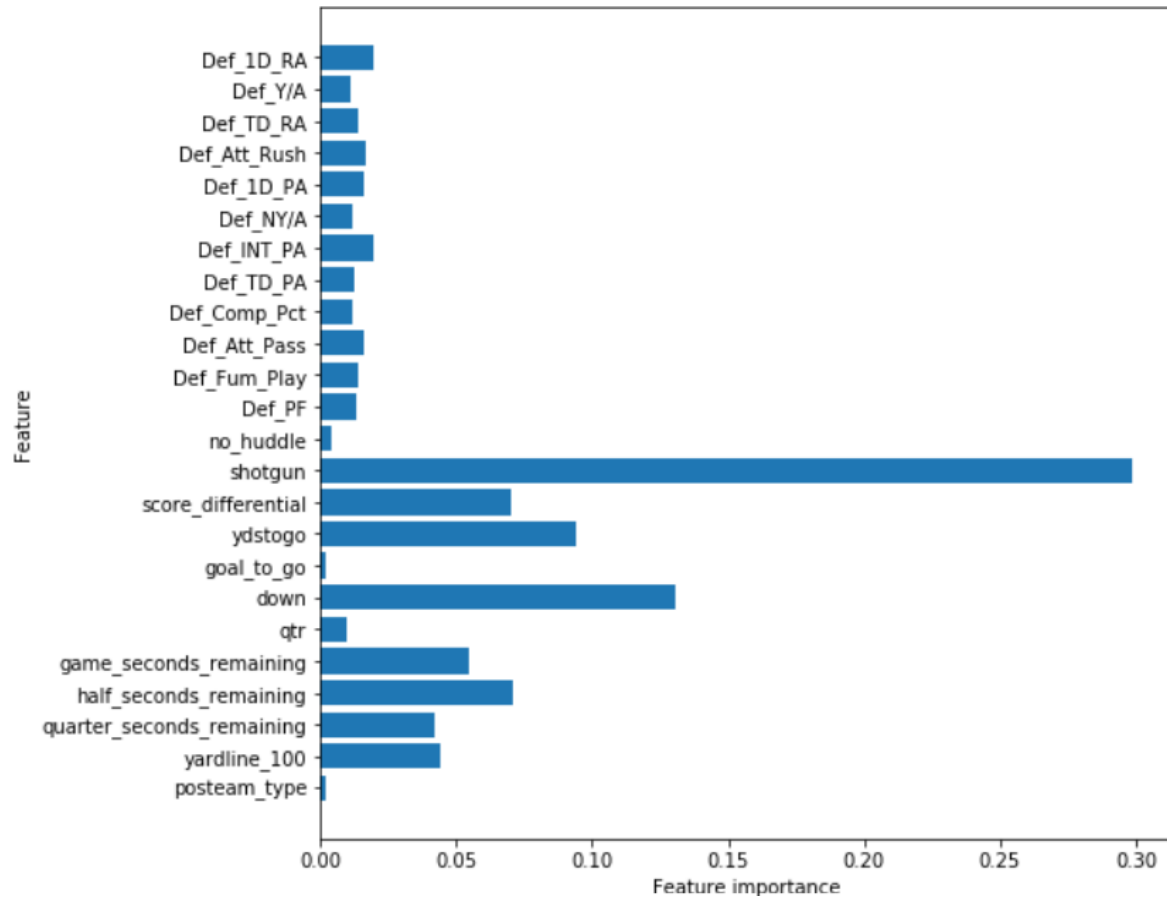
Goals

- Identify the most predictive features for NFL play calling
- Create a model that accurately predicts whether a team will run or pass the ball on the next play

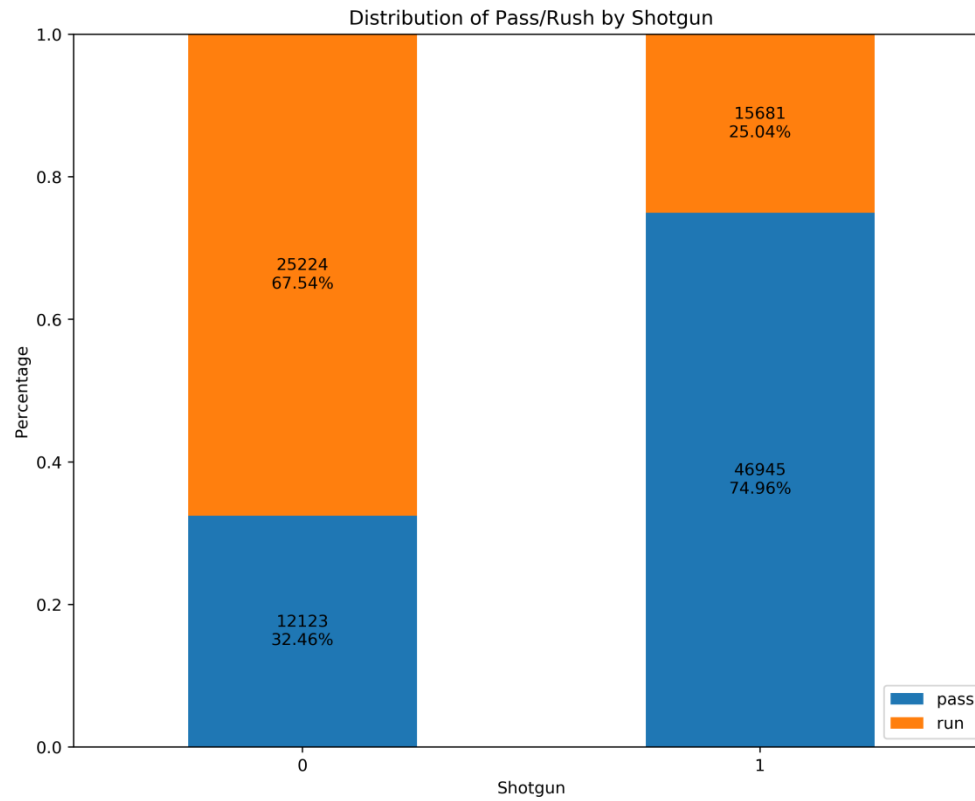
DataSet

- This dataset was acquired through two sources:
- <https://github.com/guga31bb/nflfastR-data>
- <https://www.pro-football-reference.com/>

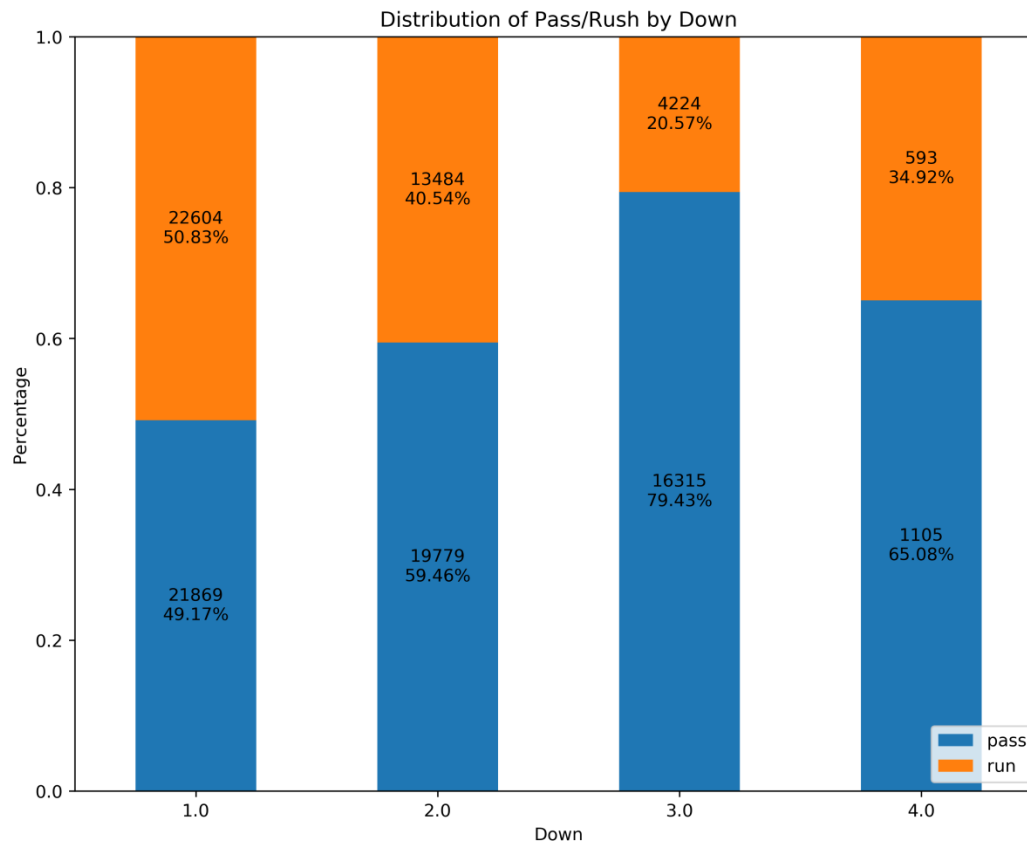
Predictive Features

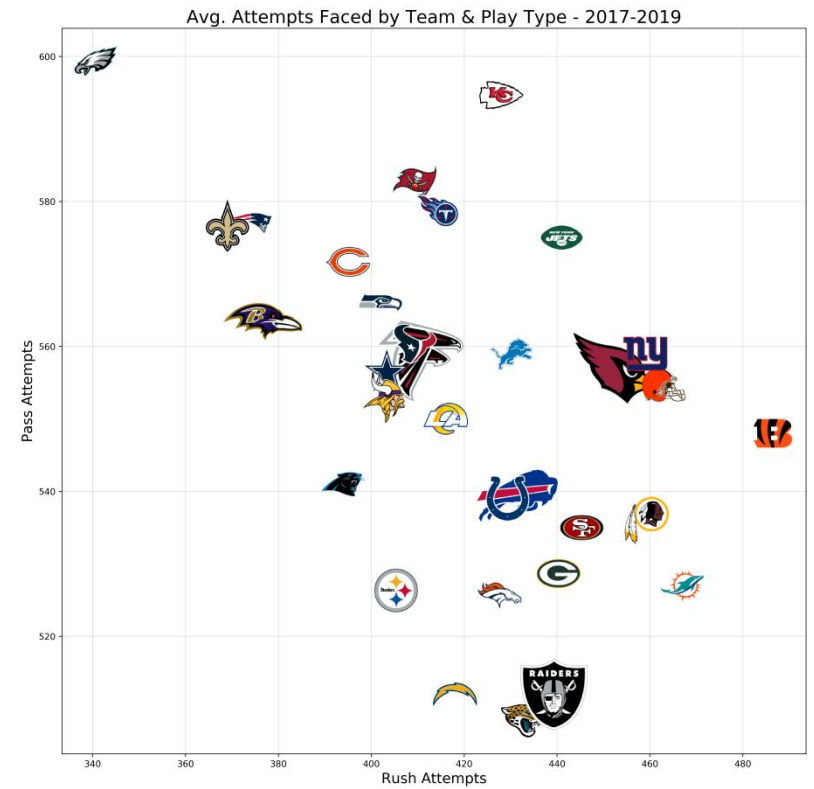


Feature #1



Feature #2





Model Use



- Model was able to predict customer churn with a 71% accuracy
- Input situational and defense data to predict whether the play will be a run or pass

Future Work

- Try out more models to improve accuracy
- Look for more data points that may be useful in predicting play call
- Create program that allows you to input situational data on the fly to allow for real-time predictions during a NFL game

Thank You



☐ Questions?