**NBA Game Predictive Analysis**

The objective of this project is to predict the winning and losing team of upcoming games for the current 2020-2021 season of the National Basketball Association.

**Primary Data sets:**

1. <https://www.nba.com/stats/teams/boxscores/>
2. <https://www.nbastuffer.com/2020-2021-nba-player-stats/>
3. <https://rapidapi.com/theapiguy/api/free-nba?endpoint=apiendpoint_0c94f219-1d0f-4fc1-8bbb-c5ee6b8327cc>

**Potential Data sets:**

* <https://www.activestate.com/blog/how-to-predict-nfl-winners-with-python/>
* <https://www.basketball-reference.com/leagues/NBA_2021.html>
* <https://www.masseyratings.com/nba>
* <https://www.kaggle.com/koki25ando/salary>
* <https://www.kaggle.com/whitefero/nba-player-salary-19902017>
* <https://data.world/datadavis/nba-salaries>
* <https://rstudio-pubs-static.s3.amazonaws.com/369734_20ddb138d1af4b488b3a978ee055ec24.html>
* <https://www.teamrankings.com/nba/player-stats/>
* <https://www.teamrankings.com/nba/player/bradley-beal/stats>
* <https://www.eskimo.com/~pbender/>

**Prospective Technics:**

1. Train a tree based supervised regression learning model utilizing confusion matrix & classification report to measure accuracy, precision and recall
2. Train an AdaBoost model (<https://scikit-learn.org/stable/modules/generated/sklearn.ensemble.AdaBoostClassifier.html>)
3. Lamda Function to label win/loss: df.col.apply(lambda x: 1 if x=="w" else 0)

**Targeted Libraries:**

1. Python3
2. Numpy
3. Pandas
4. Sklearn.tree

**Targeted Key Features:**

Team Stats:

1. Win / Loss
2. Team rating
3. FGA
4. 3 Point
5. 2 Point
6. Win / Loss streak

Pd.merge on = [“ “]

Dt.columns = []