

# ***Predicting 2019 NBA Wins with Machine Learning***

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# The NBA

*30 Teams*

*2460 Games per Season*

*~450 Players per Season (15 players per team)*

*1 Championship*



# *The Data (2004 - 2019 Season)*



**Games** : Details like number of points, etc.

**Games Details** : Details of games dataset, all statistics of players for a given game

**Players** : Players details (name)

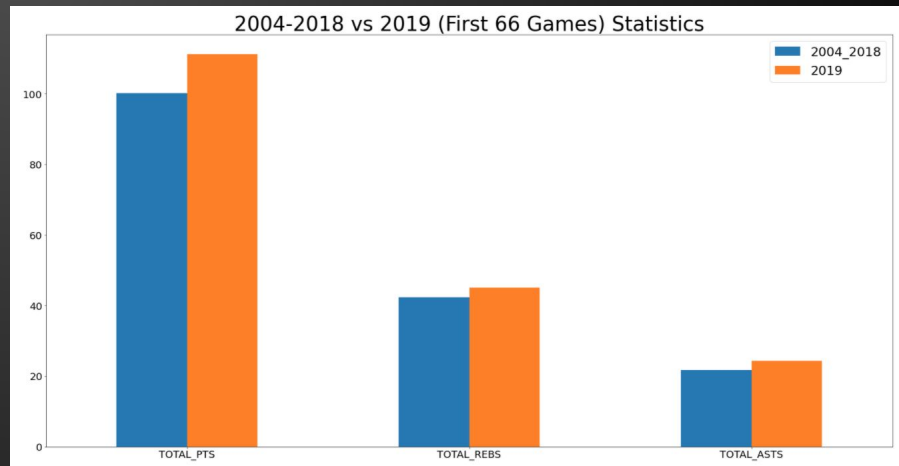
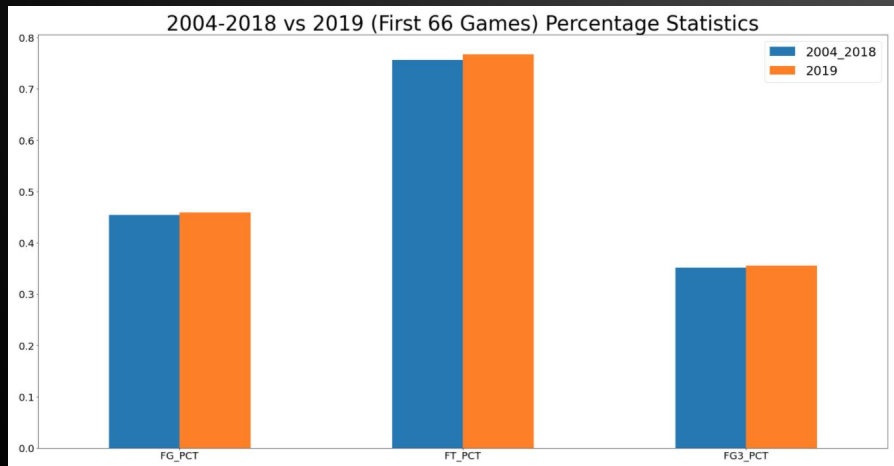
**Ranking** : Ranking of NBA given a day

**Teams** : Team details of NBA

\*At the time the data was scraped, only the first 66 games from 2019 season were included

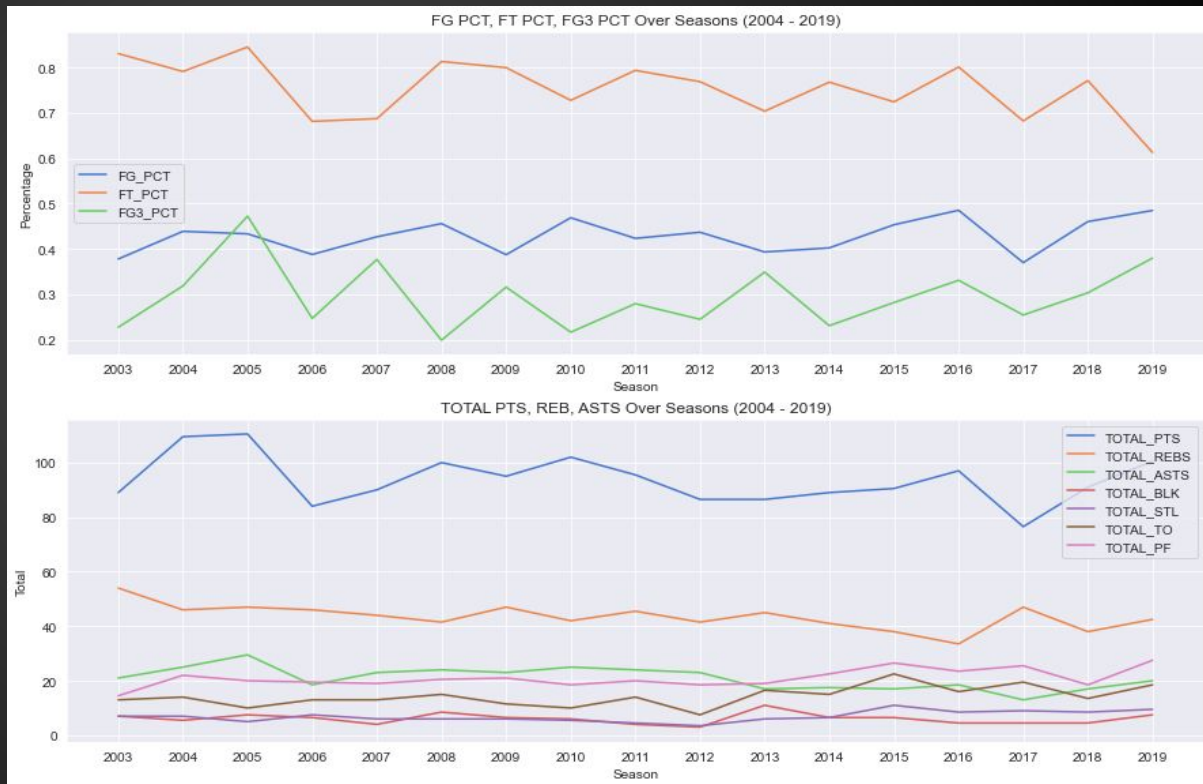
# 2004-2018 vs 2019 Statistics

	FG_PCT	FT_PCT	FG3_PCT	PTS	REBS	ASTS
2004-2018	45.38%	75.66%	35.19%	100.20	42.40	21.70
2019 (First 66 Games)	45.90%	76.71%	35.55%	111.18	45.08	24.31

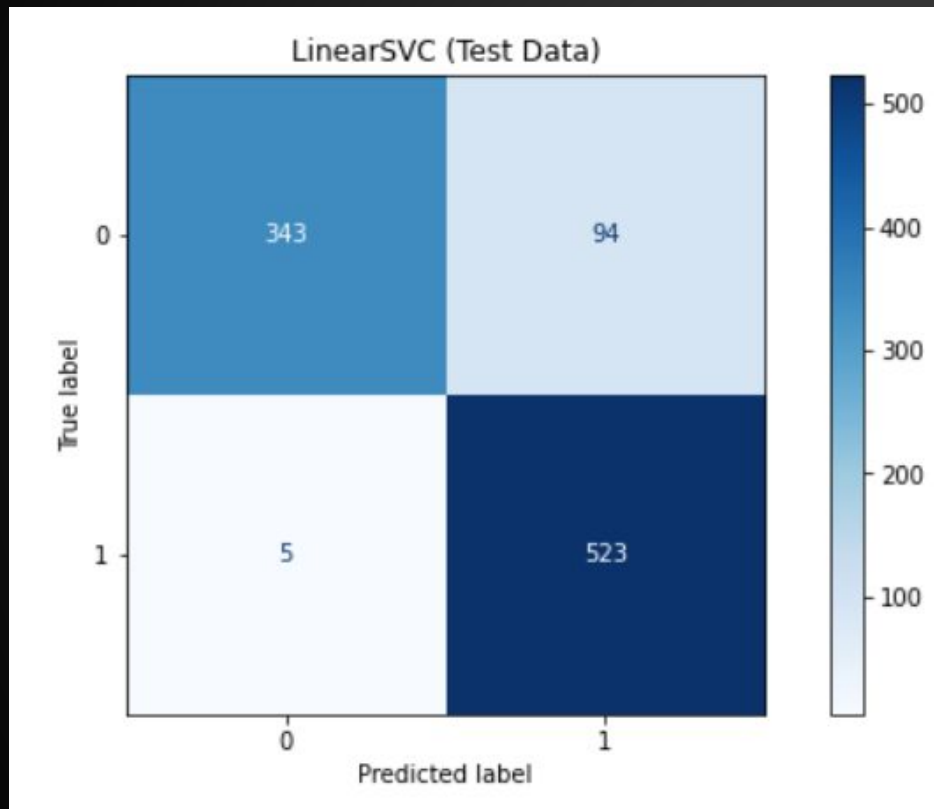


# Features that Translate to Wins

- Field Goal Percentage
- Free Throw Percentage
- 3-Point Percentage
- Rebounds
- Assists
- Blocks
- Steals
- Turnovers
- Personal Fouls



# **Best Model - Linear SVC**



## **Best Performing Model**

Linear SVC

## **Accuracy Score**

89.74%

## **Model Results**

1 - Predicted Home Wins

0 - Predicted Home Loss

# *Future Work*



- Scrape important features
- Try out different modeling algorithms
- Unsupervised learning
- Making predictions based on spread





*Thank you!*