

WINNING IN NBA

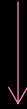
JUSTIN TUNG



Project Process

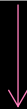
Data gathering

- Obtain data from source websites and combine (<https://www.basketball-reference.com/>, Kaggle)



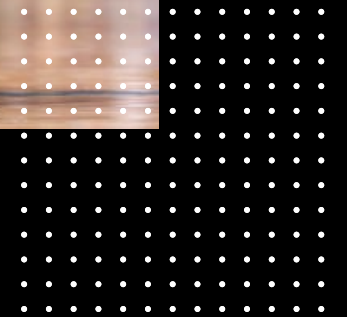
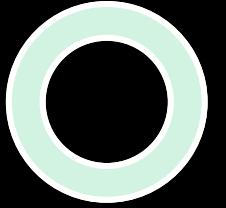
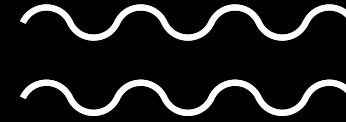
Data cleaning and exploration

- Clean data and explore columns to better understand dataset

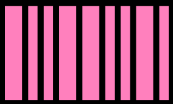


Data Visualization

- Visualize dataset in Tableau to demonstrate the relationship between different stats and wins



Github



Project code



Final dataframe

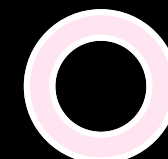
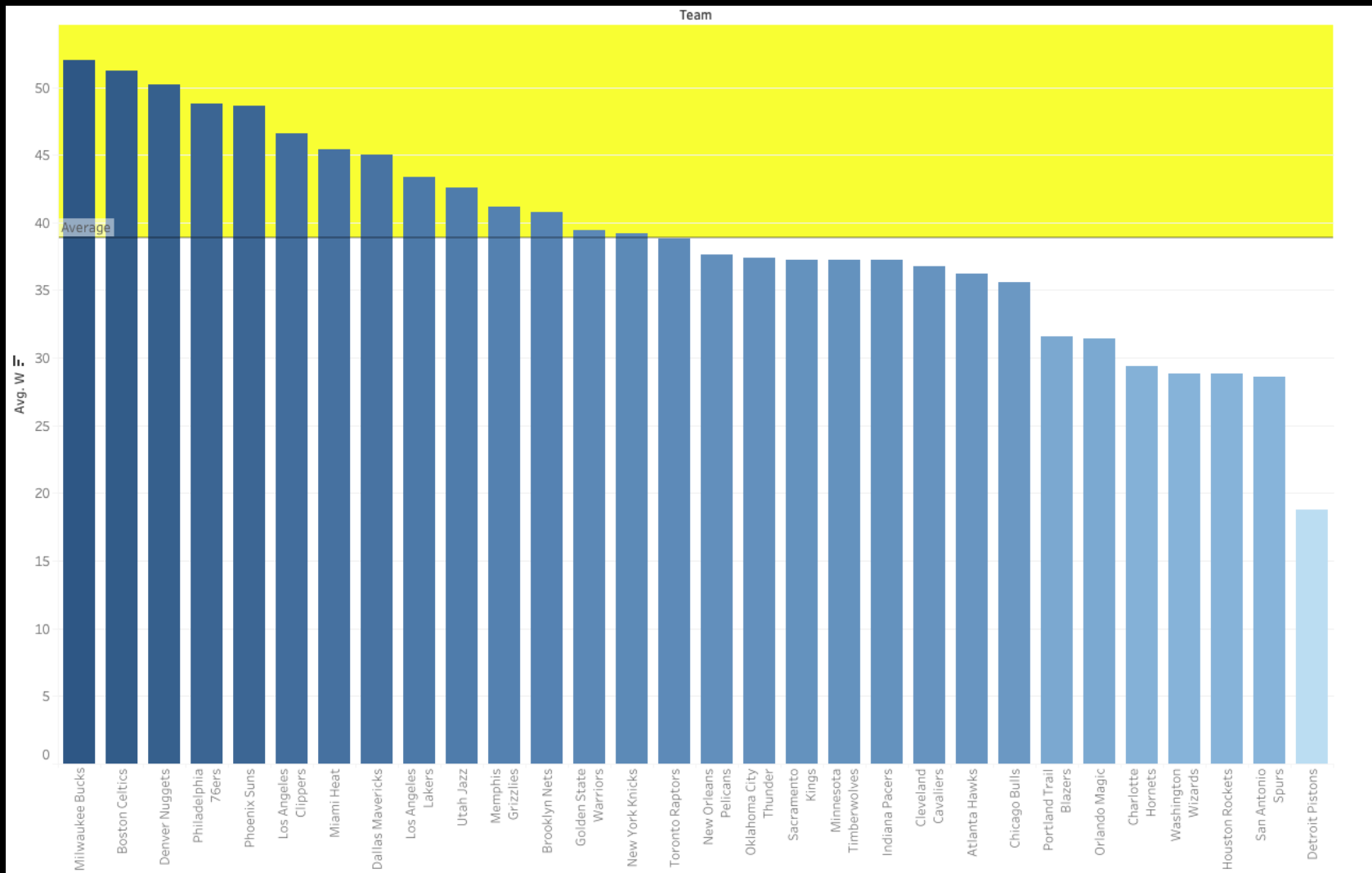


https://github.com/yichengtun/g919/Capstone_Project.git



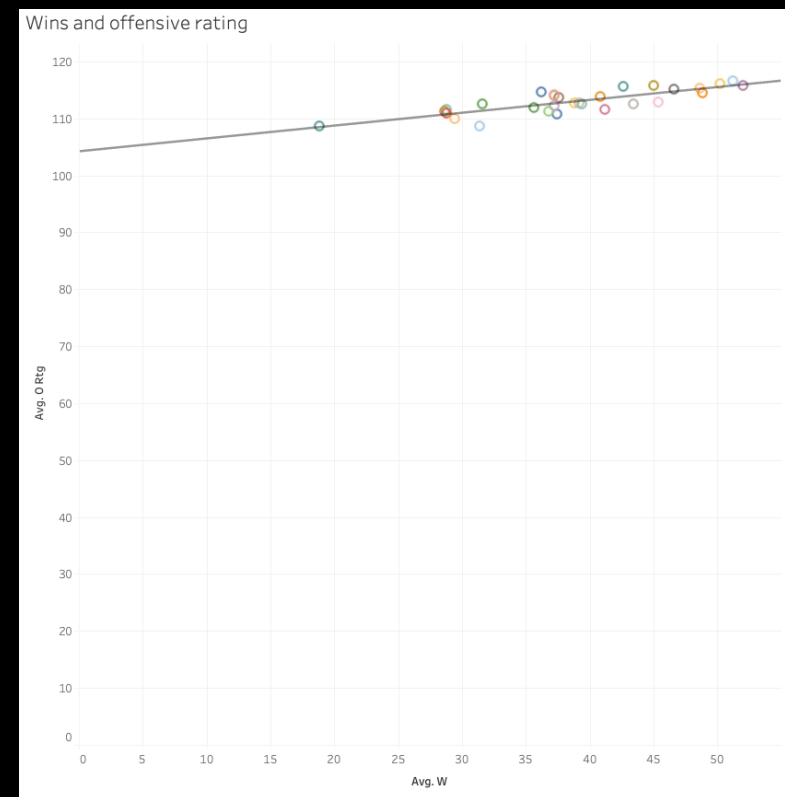
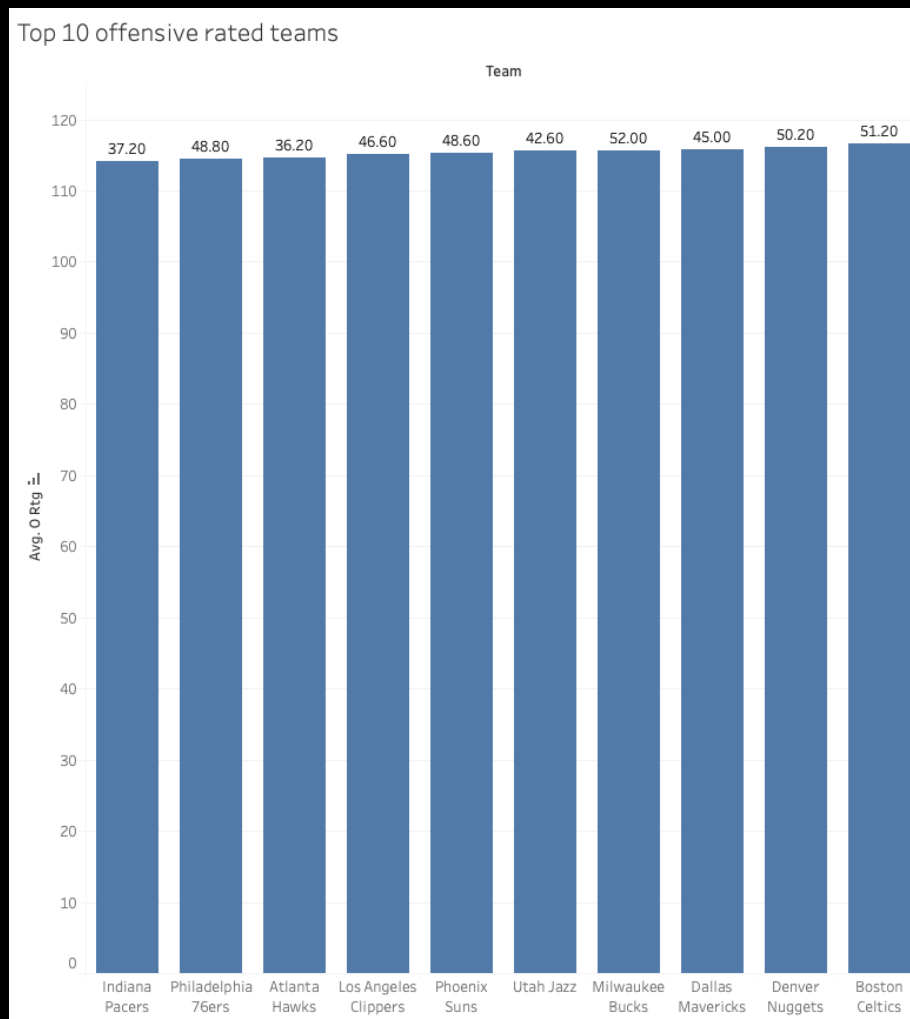
Who wins?

- 2019-2023 Season Averages
- 30 teams in total top 16 goes to playoffs
- Average 38.86 Wins



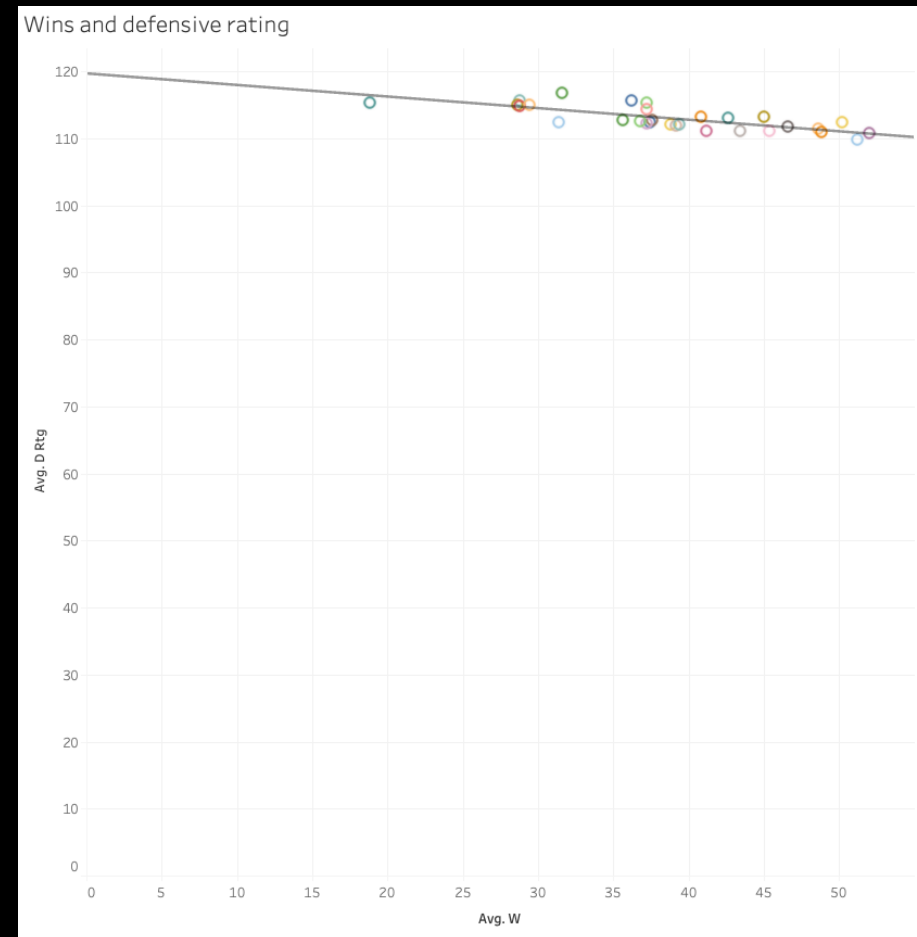
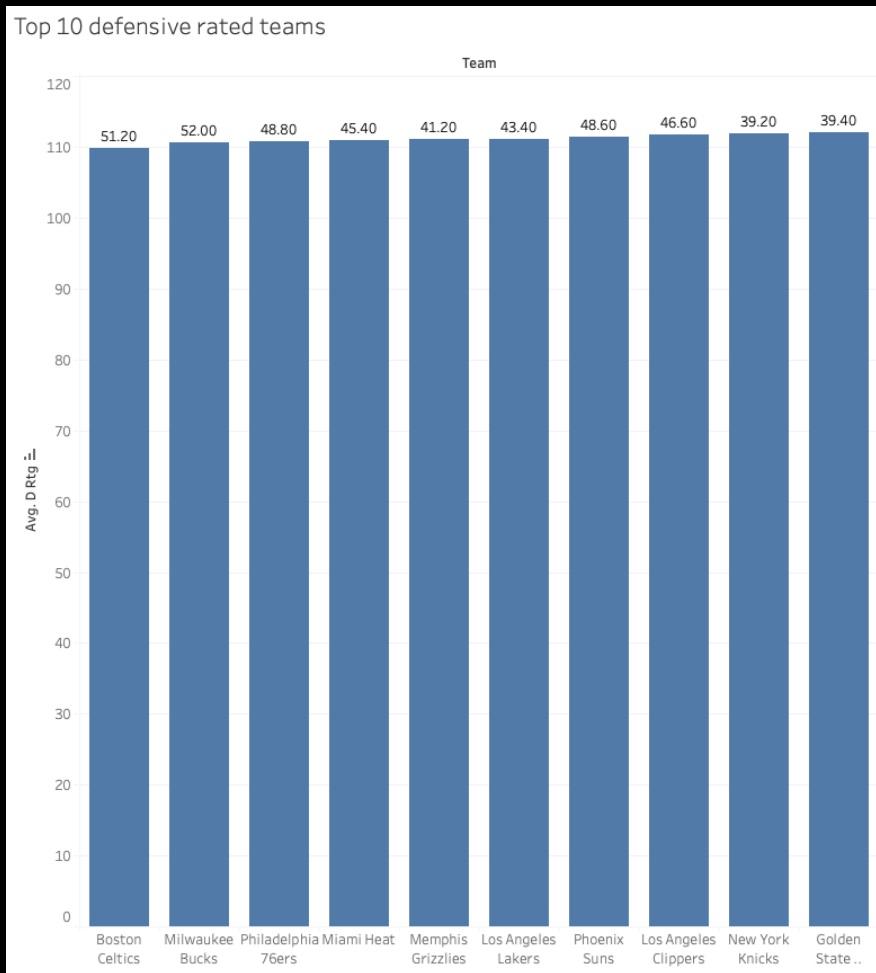
Top 10 offensive

- Celtics at the top for 116 points per 100 possession
- Positive relationship between offensive rating and wins
- R-square 0.68



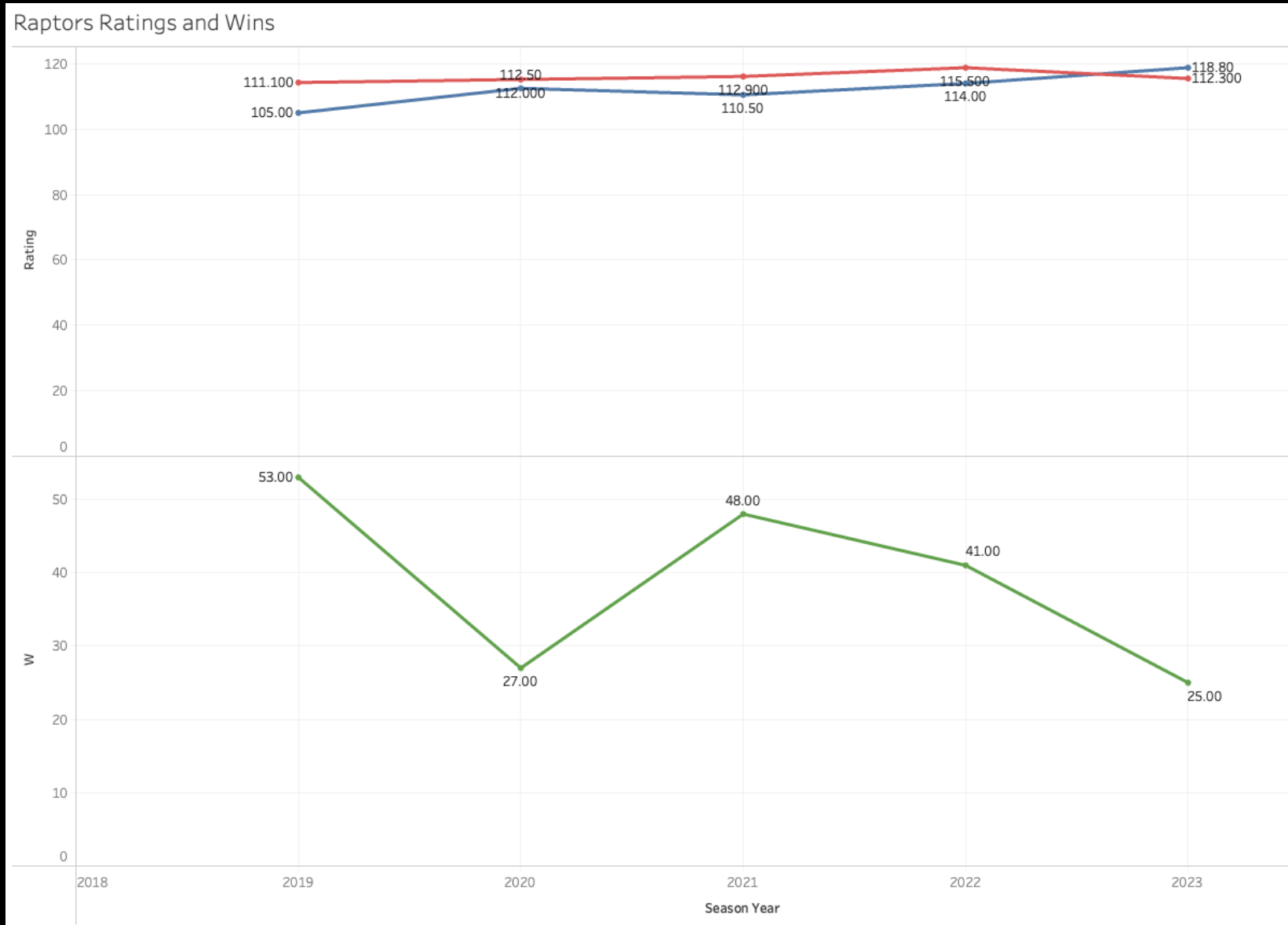
Top 10 defensive

- Celtics at the top for 109 points per 100 possession
- Negative relationship between defensive rating and wins
- R-square 0.58



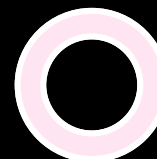
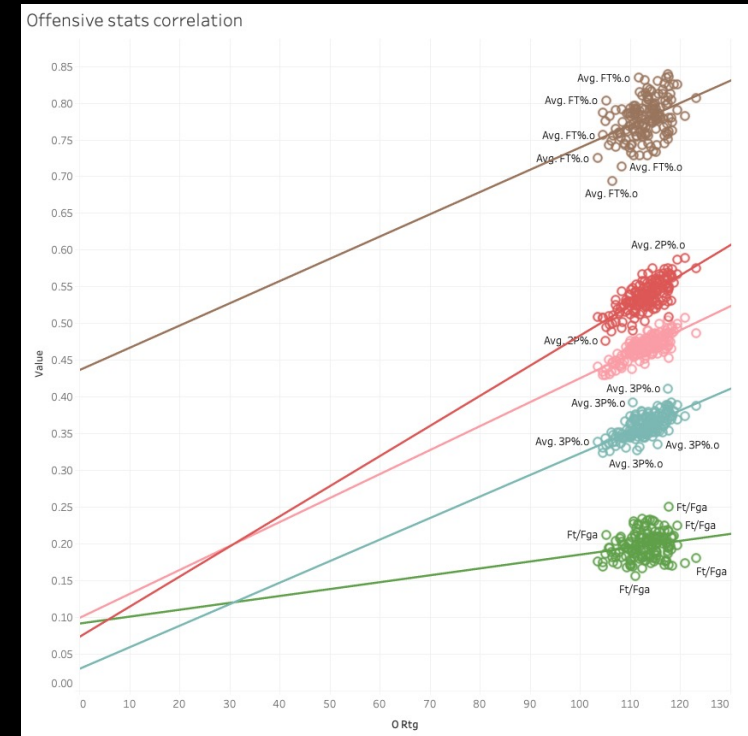
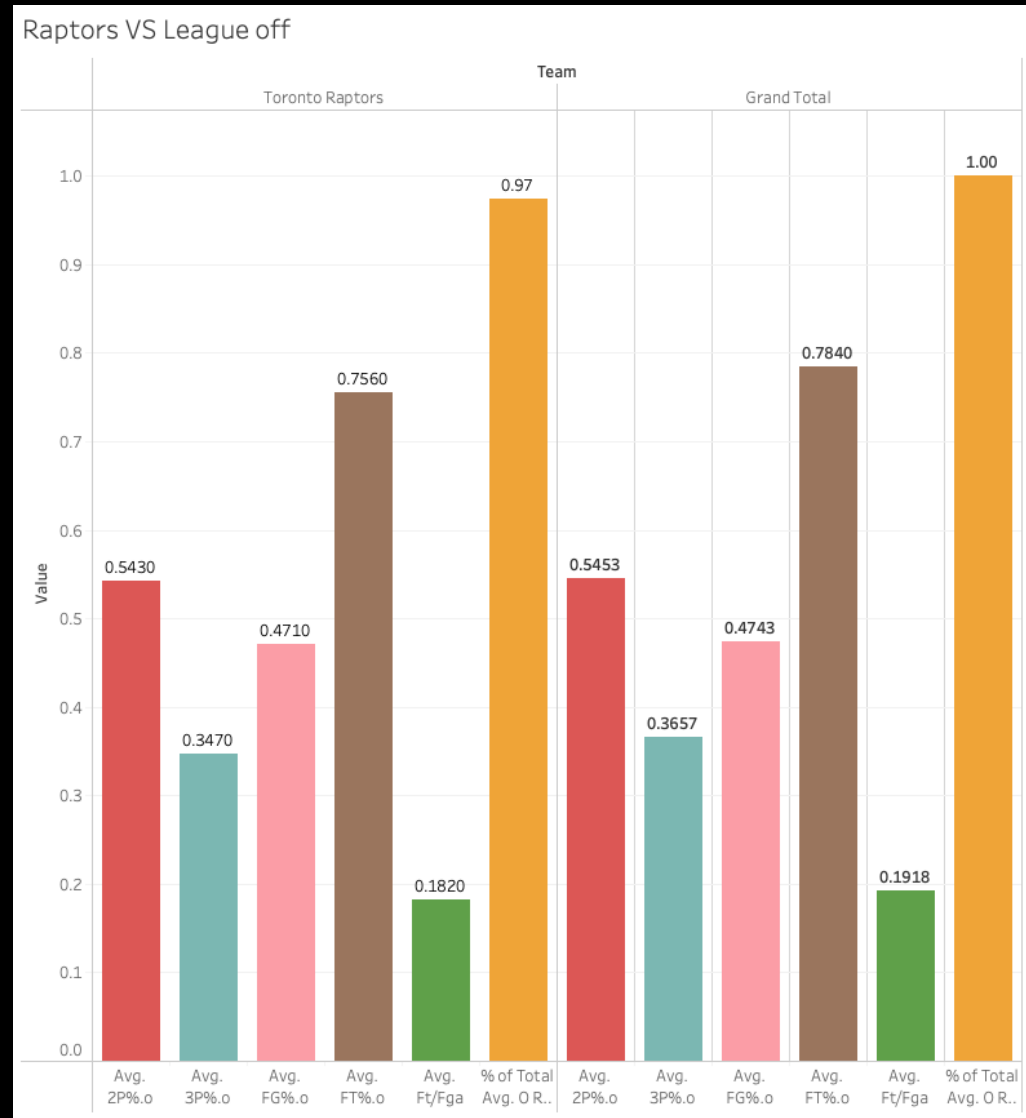
Home town hero

- Red line-Offensive rating
- Blue line- Defensive rating
- Green line- Wins
- Gap between off and def contributes to wins
- 2023 season at negative rating and lowest win record



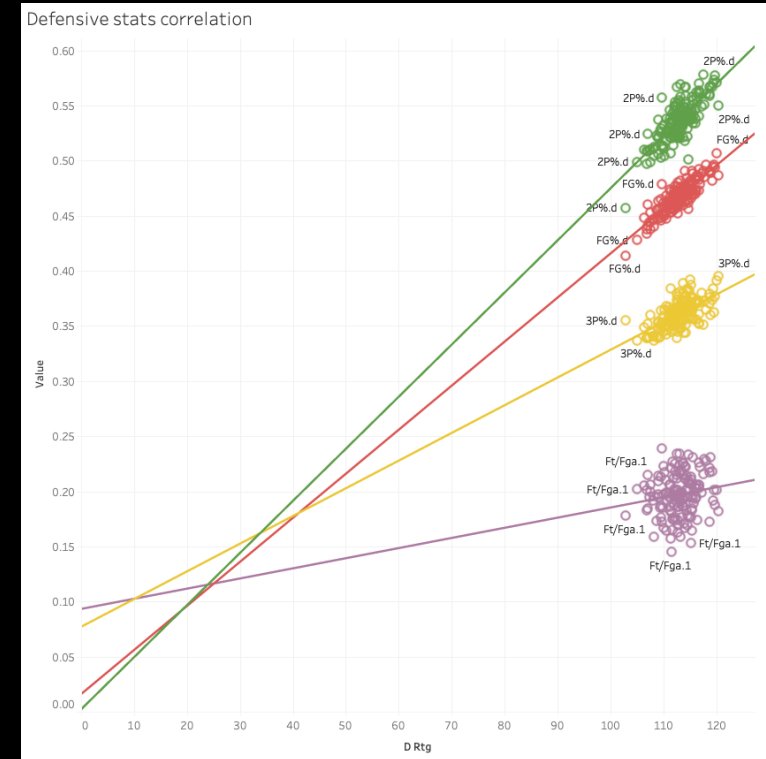
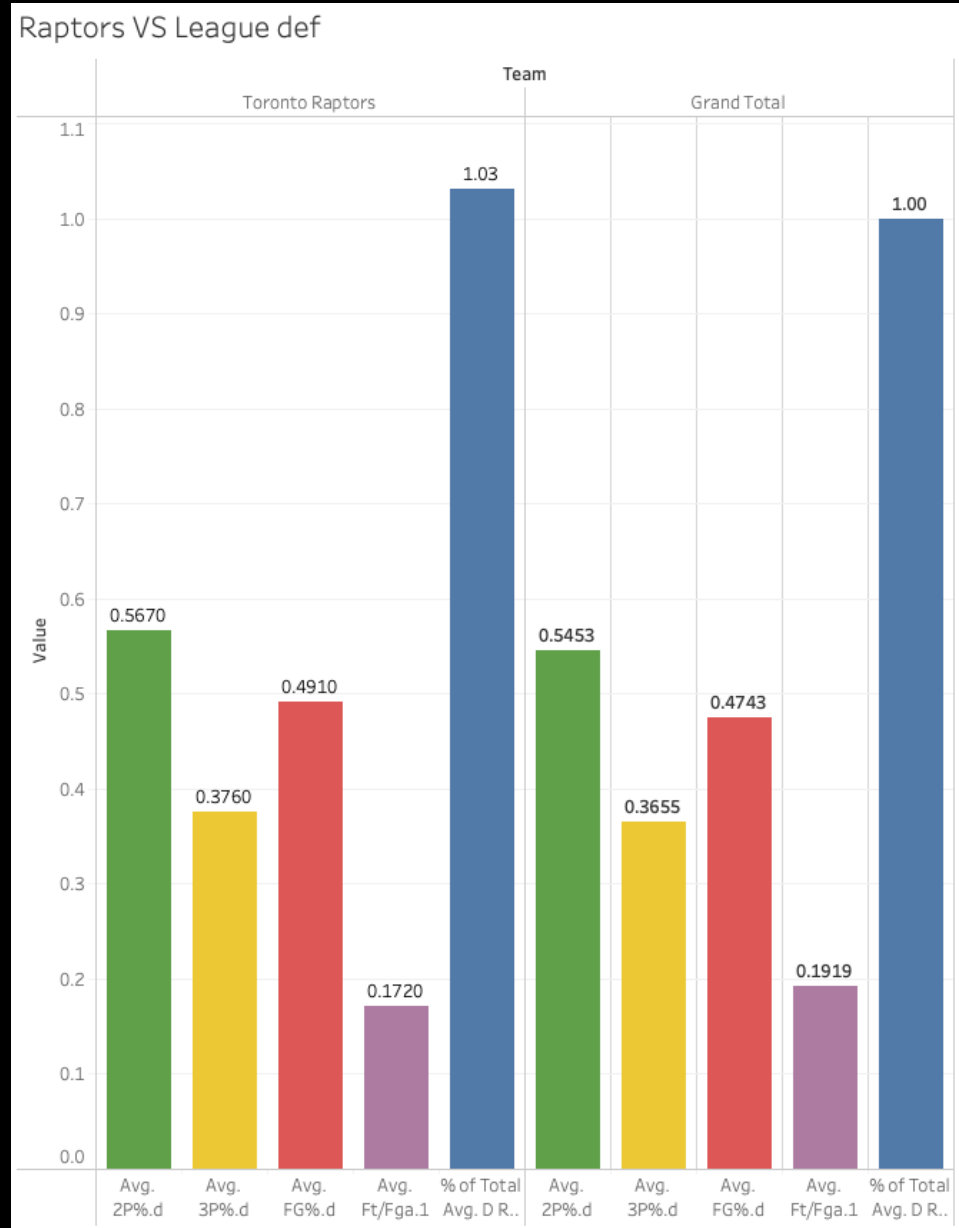
Home town hero

- Offensive stats are below average
- Offensive rating below average for 2023




Home town hero

- Defensive stats are higher than average
- Defensive rating above average for 2023





Summary

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- Winning is not determined by one single stat
 - Offense is contributing to winning but defense is also very important to create the net rating gap
 - Further analysis can be done on a player level
 - Raptors offseason has a lot of work to be done!

THANK
YOU

