

2020 NBA Season Analysis



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Soham Mishra

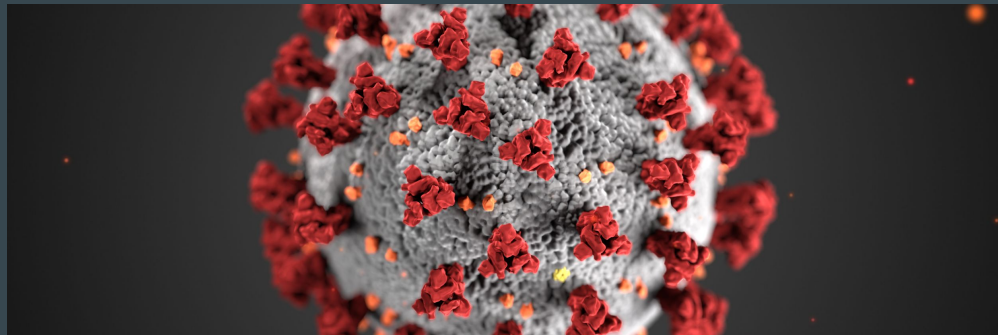


Data

- I used Selenium to scrape stats.nba.com for data for the last 5 years
 - ~2500 Rows, 31 Columns
- Important Notes:
 - All stats are on a per game basis
 - **Plus/Minus:** How the team did when the player was on the court
 - Encompasses the “intangibles”
 - TS: Total Shooting Percentage
 - Takes 2pt shots, 3pt shots, and Free Throws into account
 - Relevant Players: Players that have played at least half the season

Purpose

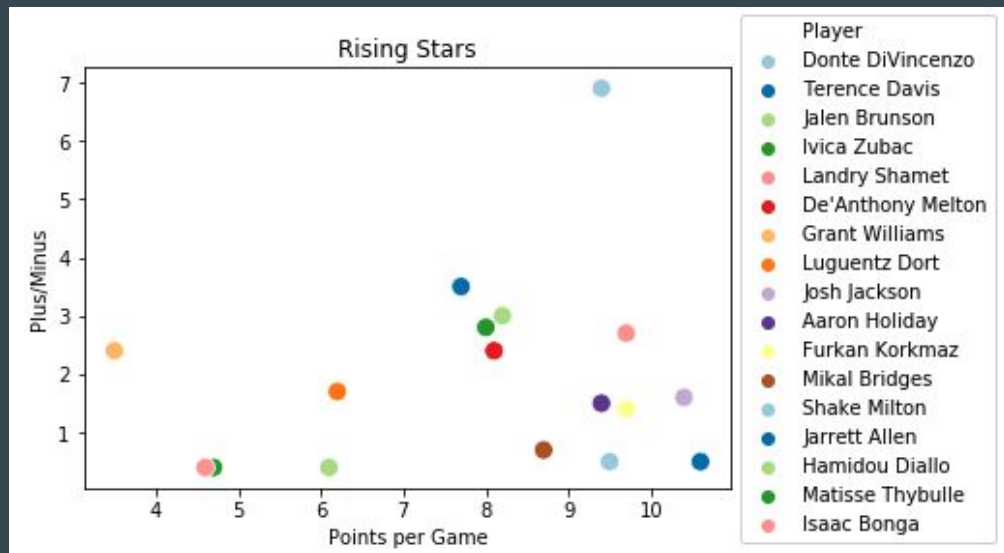
- Sadly, the NBA season might be over due to Covid-19
- Goals for the project:
 - Use 2020 season data to look ahead to next season
 - Identify rising talent
 - Undervalued players
 - Analyze this season's data to speculate my own 2020 NBA Awards



Looking to the 2021 Season

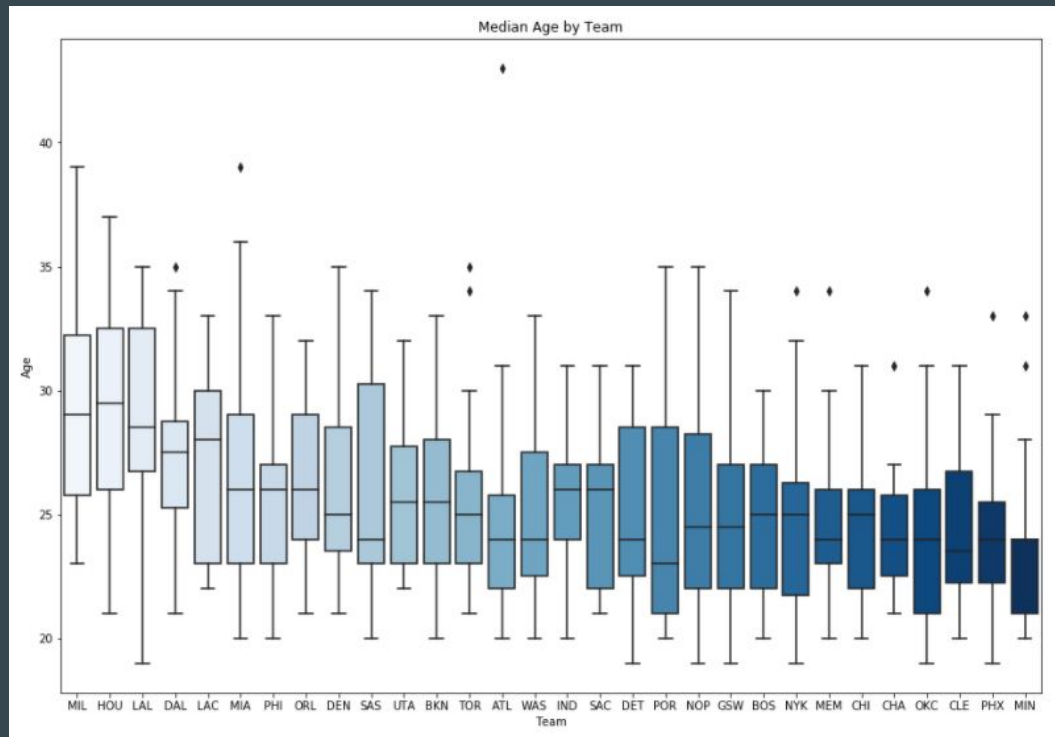
How to Identify Up and Coming Players?

- Young
 - Age < 24
- Above average team impact
 - Plus/Minus > +.3
- Filter players that are already stars
 - 15 > Minutes > 30



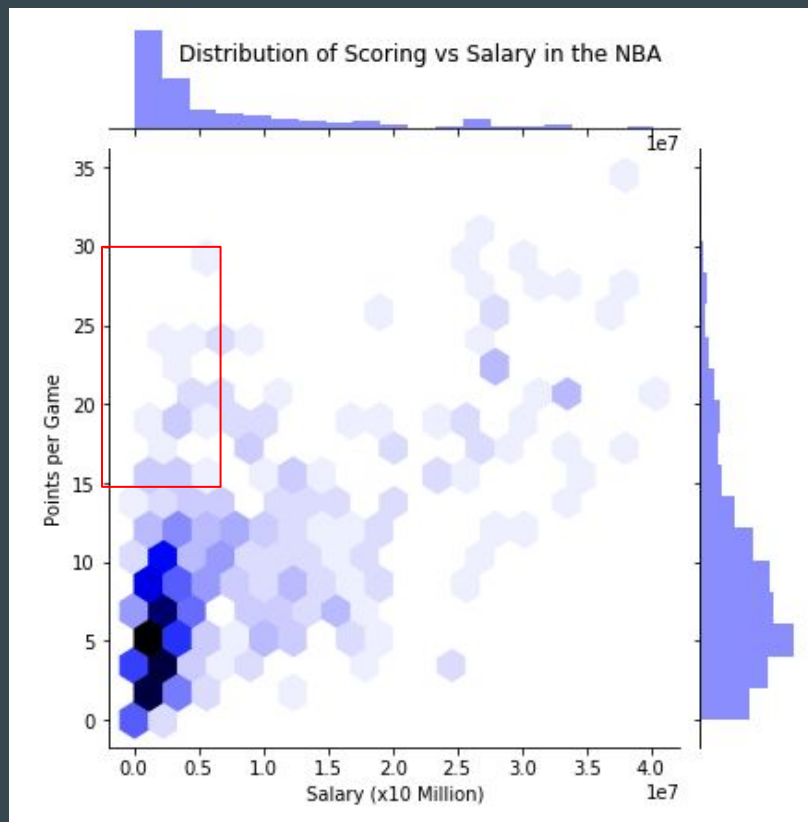
Young Teams to Watch Next Season

- Generally, experienced teams performed better than young teams
- Teams to watch:
 - Memphis
 - Golden State



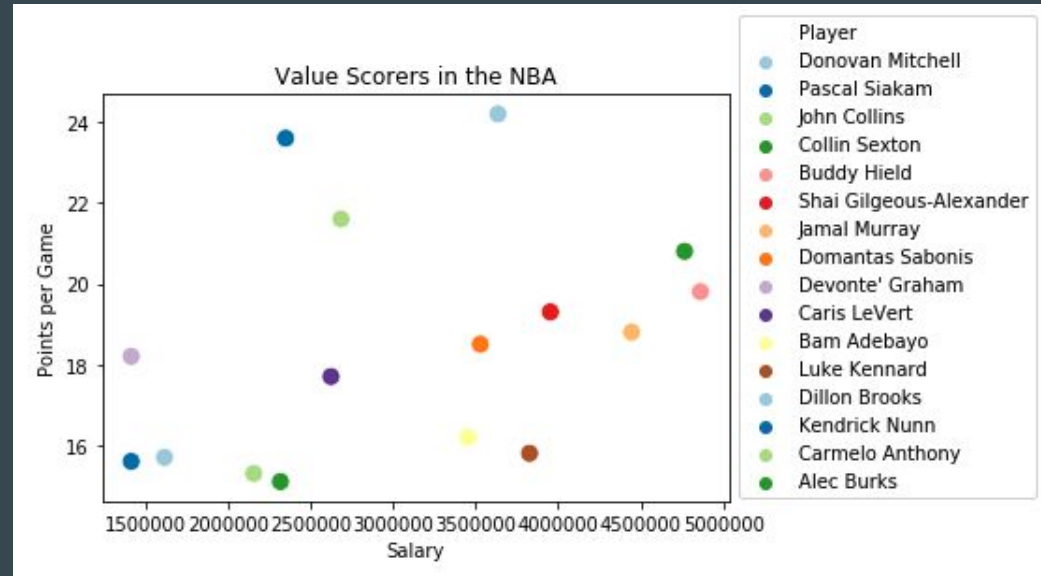
Who is Undervalued?

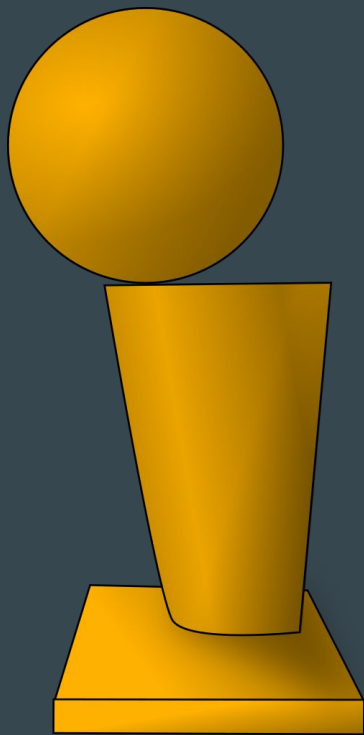
- Plot distribution of salaries in the NBA and compare to scoring
- Filter for specific criteria to find undervalued scorers
 - Player > 15 points per game
 - Player $< \$5\text{M}$



Who is Undervalued?

- After filtering, I found 16 undervalued scorers
- Pascal Siakam from Toronto and John Collins from Atlanta are most undervalued



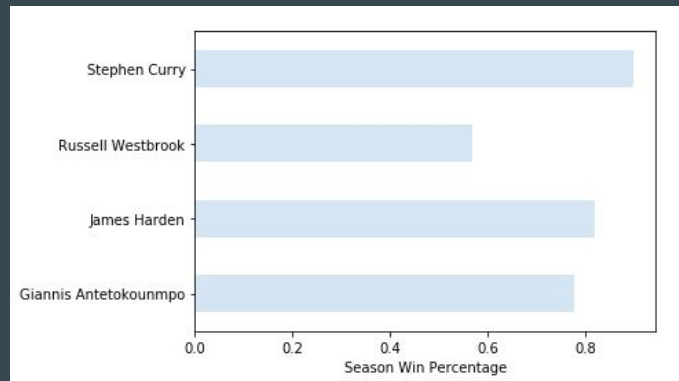
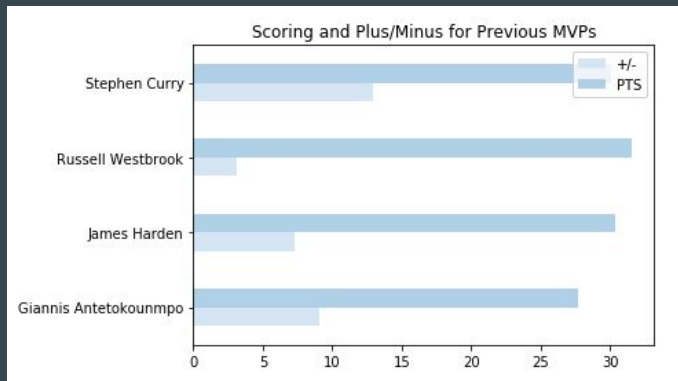


2020 NBA Awards



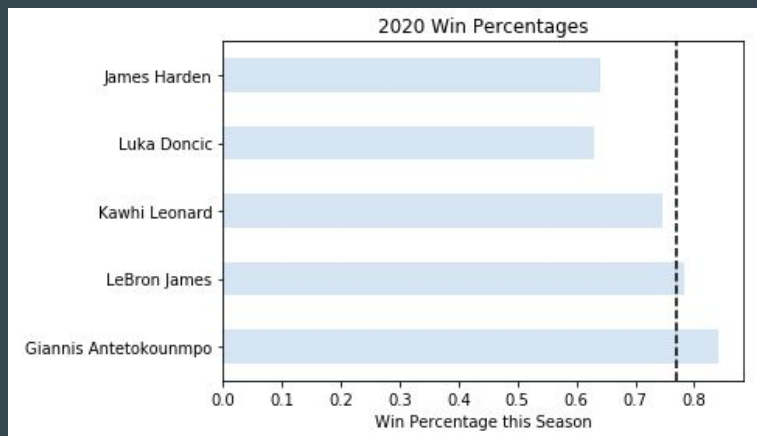
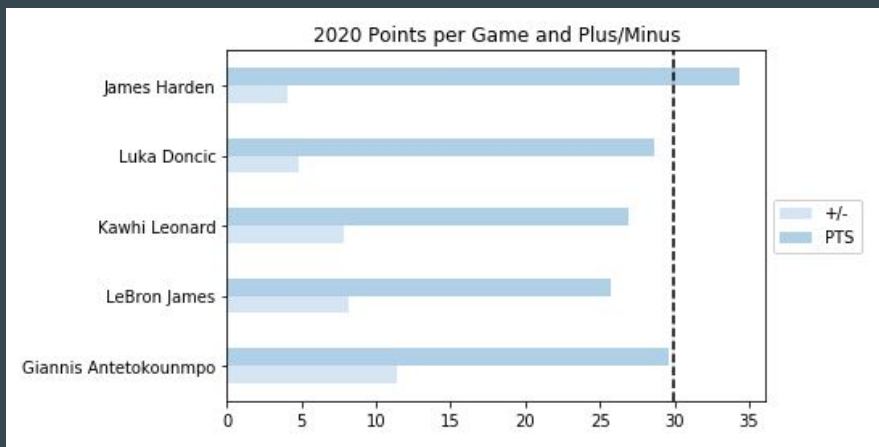
2020 MVP

- Methodology:
 - Look at stats for previous 4 NBA MVPs
 - Use domain knowledge to identify key stats
 - Compare 2020 MVP candidates using key stats
- Key Factors:
 - Points per Game
 - Plus/Minus
 - Team Wins



2020 MVP

- Giannis and Harden meet the MVP average for Scoring
 - Giannis has the highest Plus/Minus
- Giannis and LeBron meet the MVP average for Win Percentage

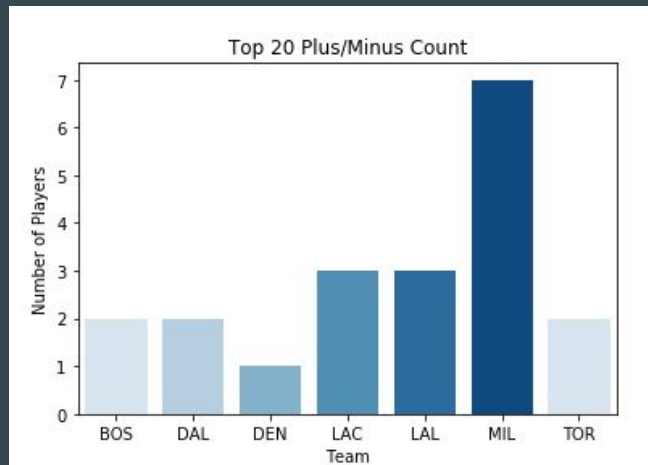
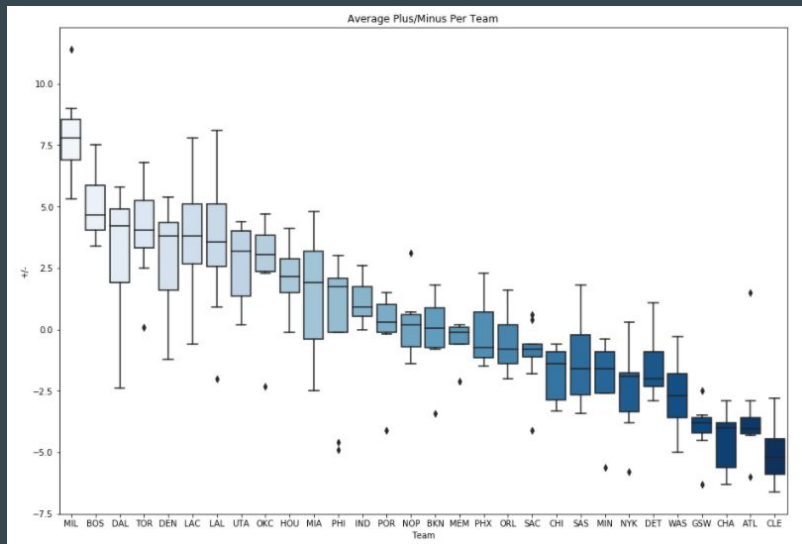


Your 2020 MVP: Giannis Antetokounmpo



2020 NBA Champion

- Methodology:
 - Filter for 'relevant' players
 - Played at least half the games
 - In those games, played at least half the minutes
 - Analyze each team based on Plus/Minus for the Relevant players



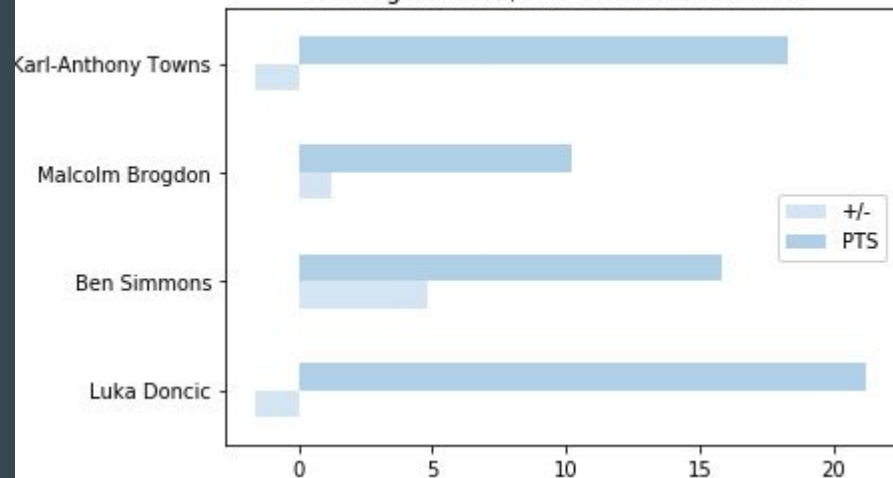
Your 2020 NBA Champions:



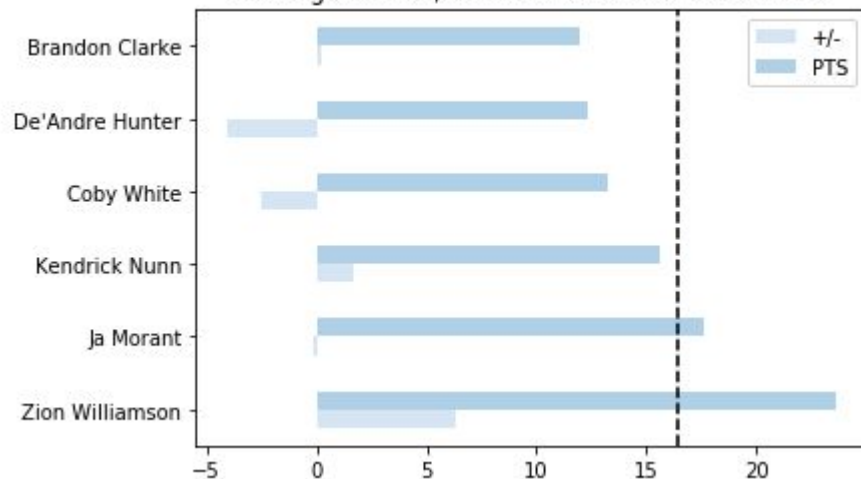
appendix

- Rookie of the Year

Scoring and Plus/Minus for Previous ROYs



Scoring and Plus/Minus for 2020 ROY Candidates



Rookie of the Year

