2021-22 NBA Season EDA

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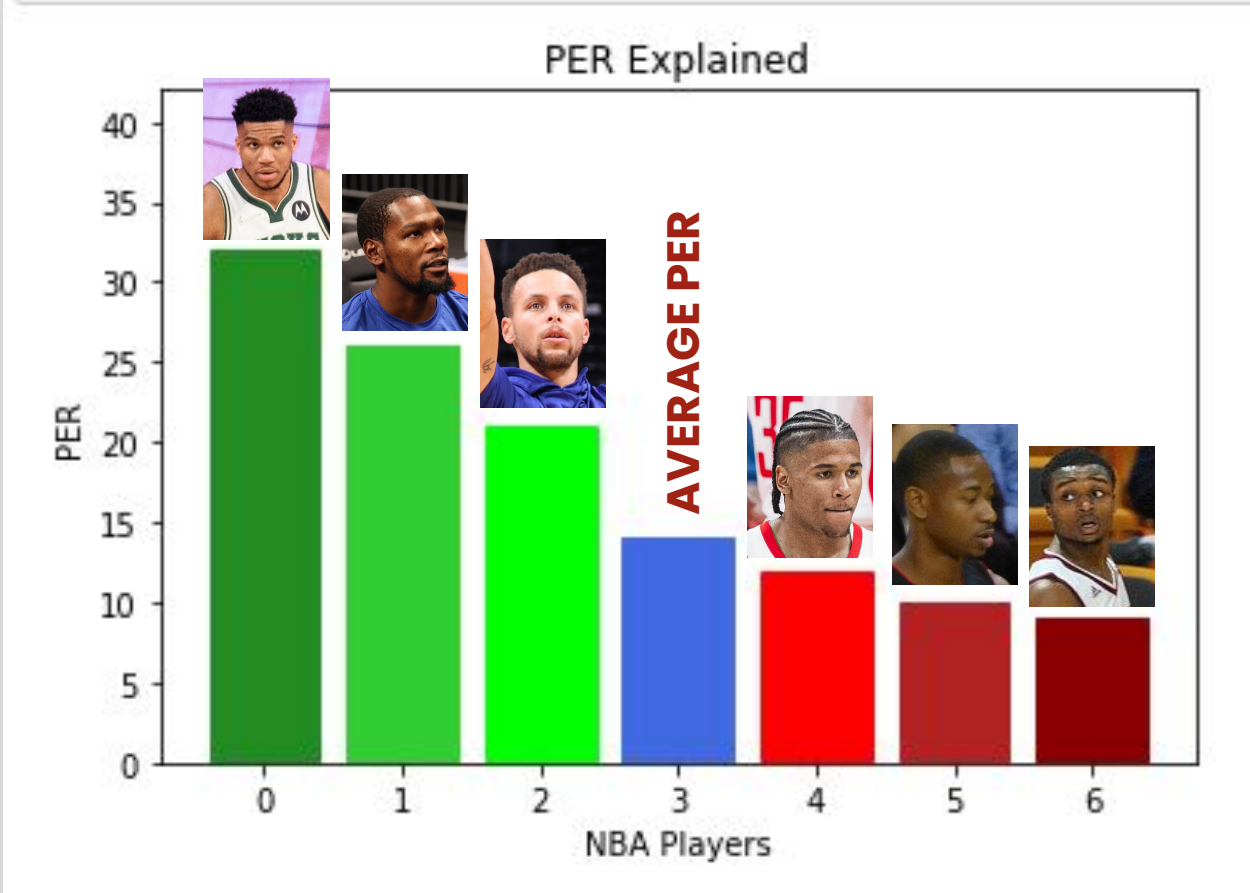
Purpose: NBA 2021-22 EDA

PER, Explained

Player **E**fficiency **R**ating

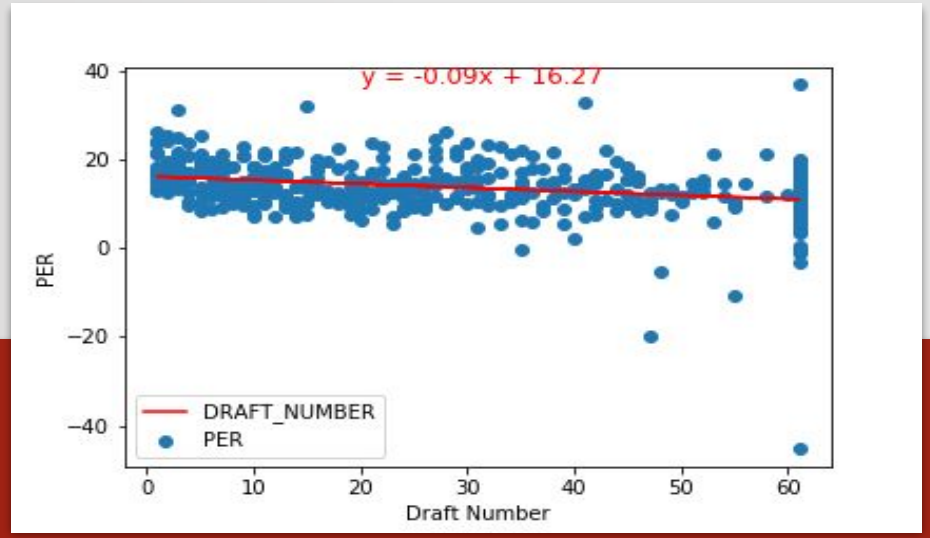
Metric used by NBA to distill a player's contributions into a single numerical statistic.

Average PER = 15

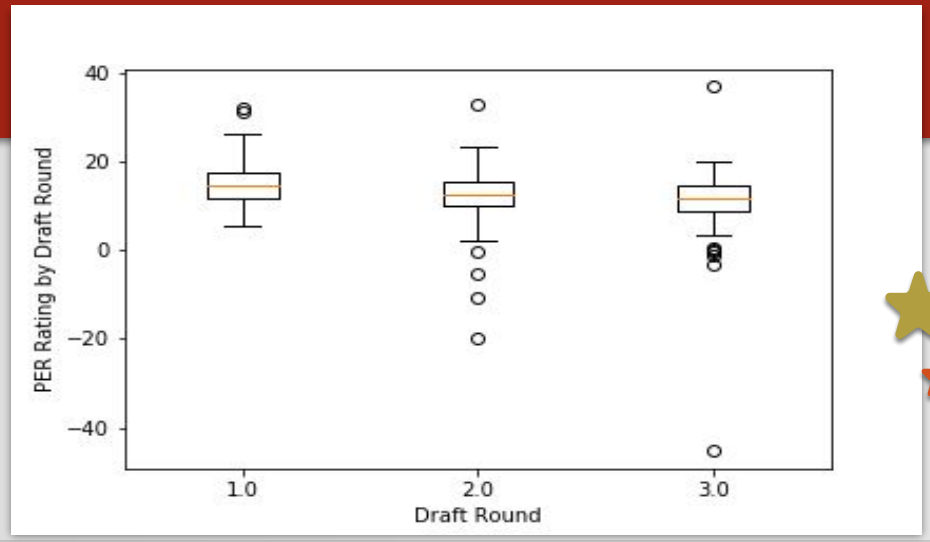


Draft Picks and PER

DRAFT_NUMBER	Players in Draft Number	AVG PER in Draft Number
1.0	12	19.050000
3.0	13	18.915385
2.0	9	18.233333
27.0	8	17.675000
22.0	6	16.766667
43.0	3	16.600000
58.0	2	16.500000
5.0	11	16.309091
16.0	6	16.300000
41.0	6	16.250000
30.0	8	16.175000
29.0	6	16.016667



DRAFT_ROUND	Players in Draft Round	AVG PER in Draft Round
1.0	257	15.049027
2.0	119	12.601681
3.0	115	11.201739

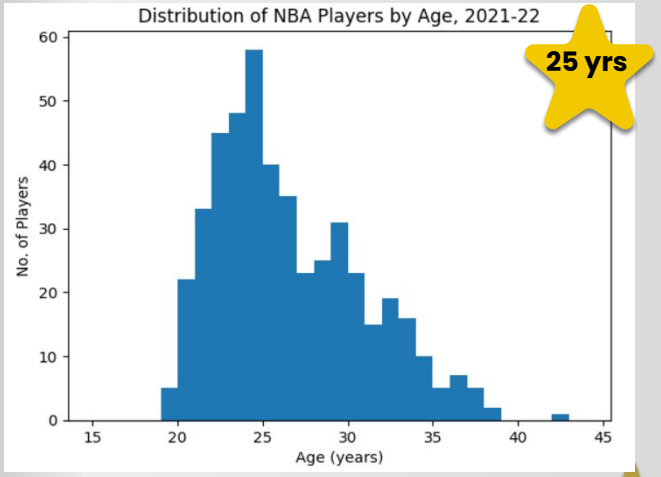


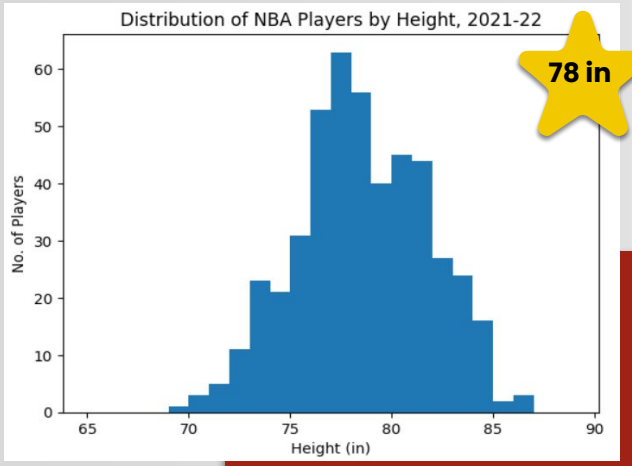
2021-22 Superlatives based on Draft Round and PER

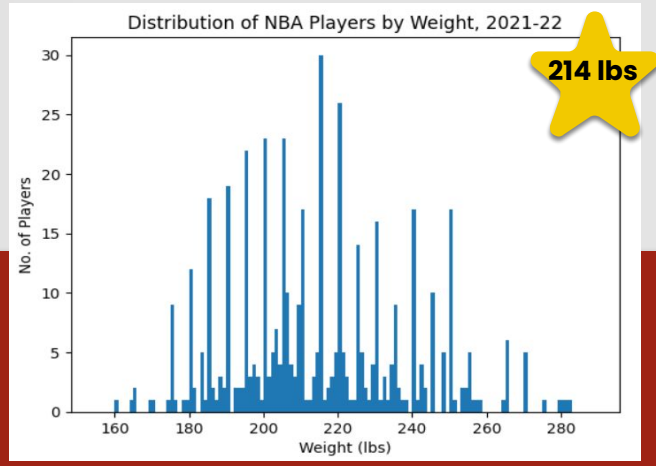
```
#figuring out who is the veteran (drafted earlier than 2020) MVP
vet_sup = cor_player_draft_pick.loc[(cor_player_draft_pick['DRAFT_YEAR']<2021)
                                    & (cor_player_draft_pick['G'] >= cor_player_draft_pick['G'].mean())]
vet_sup = vet_sup[vet_sup['PER']== vet_sup['PER'].max()]['Player Name']
print(f"the veteran superlative goes to {vet_sup}")

#figuring out who is the rookie (drafted in 2021) MVP
rook_sup = cor_player_draft_pick.loc[(cor_player_draft_pick['DRAFT_YEAR']==2021)
                                     & (cor_player_draft_pick['G'] >= cor_player_draft_pick['G'].mean())]
rook_sup = rook_sup[rook_sup['PER']== rook_sup['PER'].max()]['Player Name']
print(f"the rookie superlative goes to {rook_sup}")

#figuring out who the undrafted MVP is
undraft_sup = cor_player_draft_pick.loc[(cor_player_draft_pick['DRAFT_YEAR']==3000)
                                        & (cor_player_draft_pick['G'] >= cor_player_draft_pick['G'].mean())]
undraft_sup = undraft_sup[undraft_sup['PER']== undraft_sup['PER'].max()]['Player Name']
print(f"the undrafted superlative goes to {undraft_sup}")
```

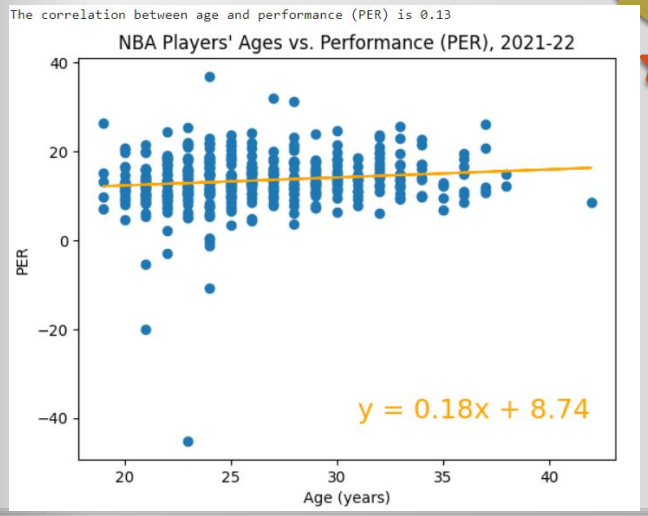
```
veteran superlative goes to 112    Nikola Jokic
: Player Name, dtype: object
rookie superlative goes to 256    Scottie Barnes
: Player Name, dtype: object
undrafted superlative goes to 152    Christian Wood
: Player Name, dtype: object
```

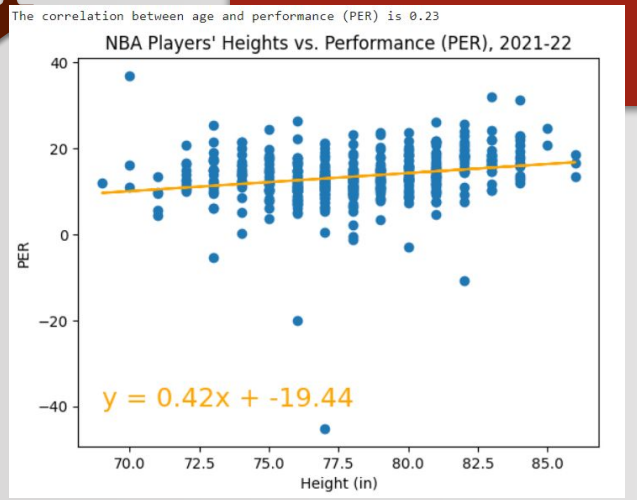
Biometrics

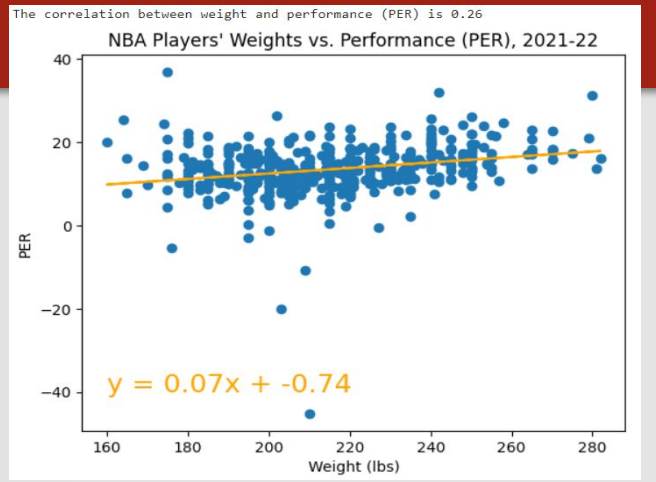




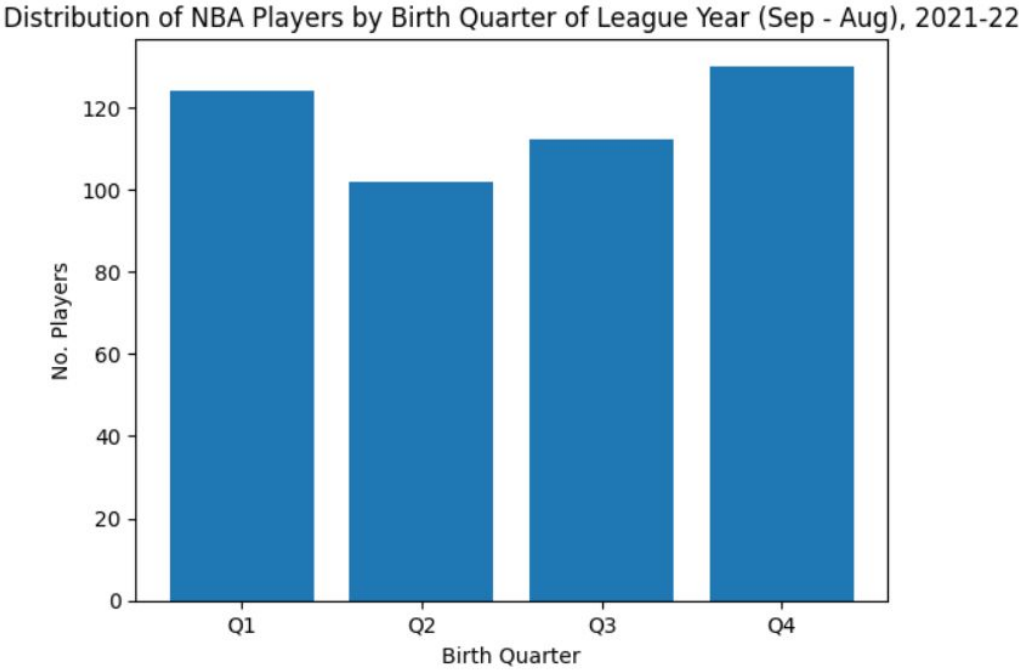








Birth Month by Quarter



NBA League Year: August - September

- **Q1 (Sep - Nov)**
- **Q2 (Dec - Feb)**
- **Q3 (Mar - May)**
- **Q4 (Jun - Aug)**

H_1: Due to cumulative advantages of being the oldest players in respective youth teams, players born in the 1st quarter of each league year would have higher representation in the NBA.

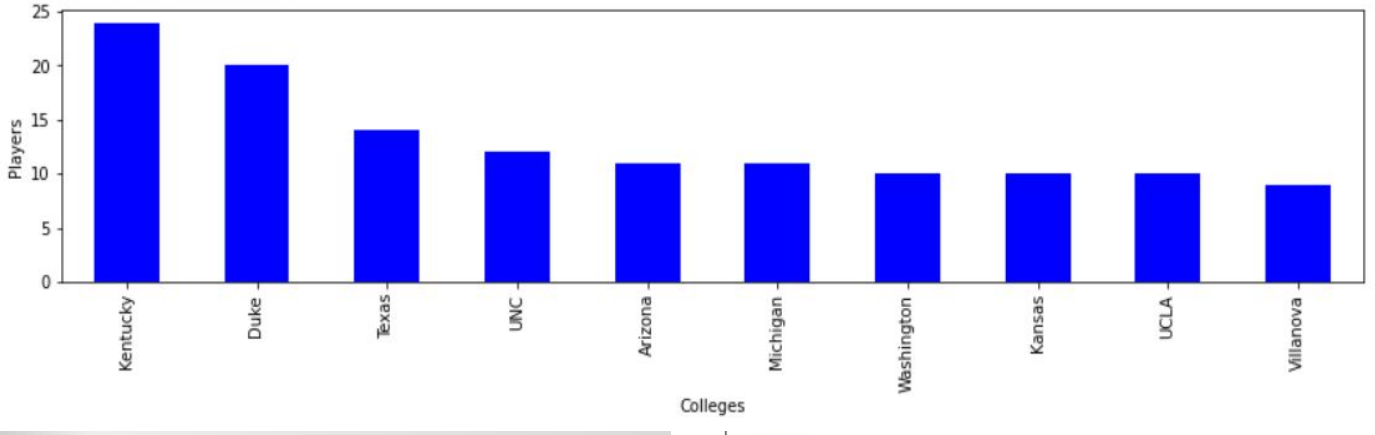
H_0: There was no advantage in representation between players born in the first and the other quarters of the NBA league year.

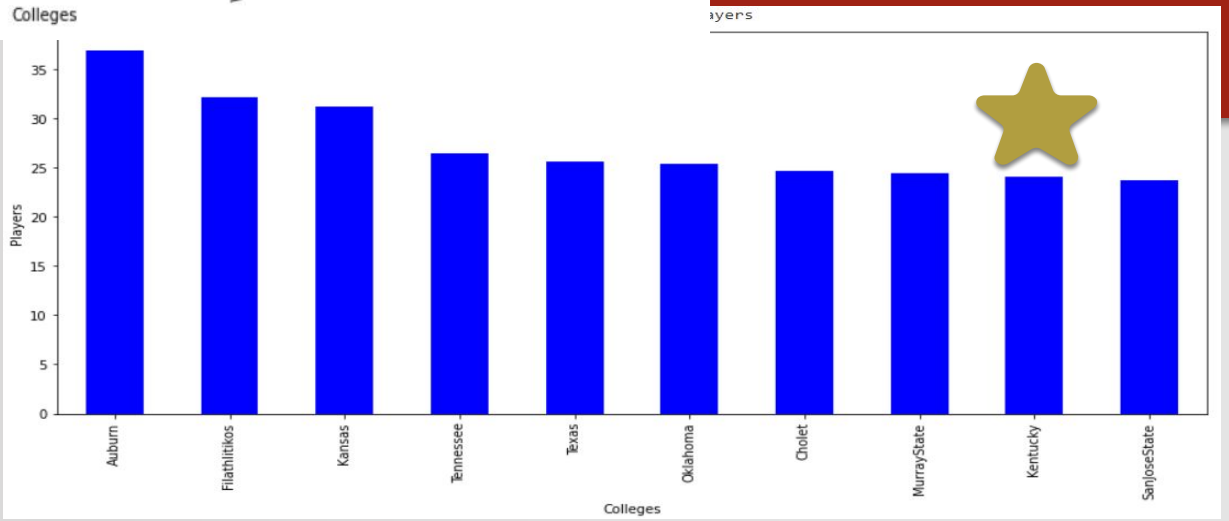
Analysis by Origin

College

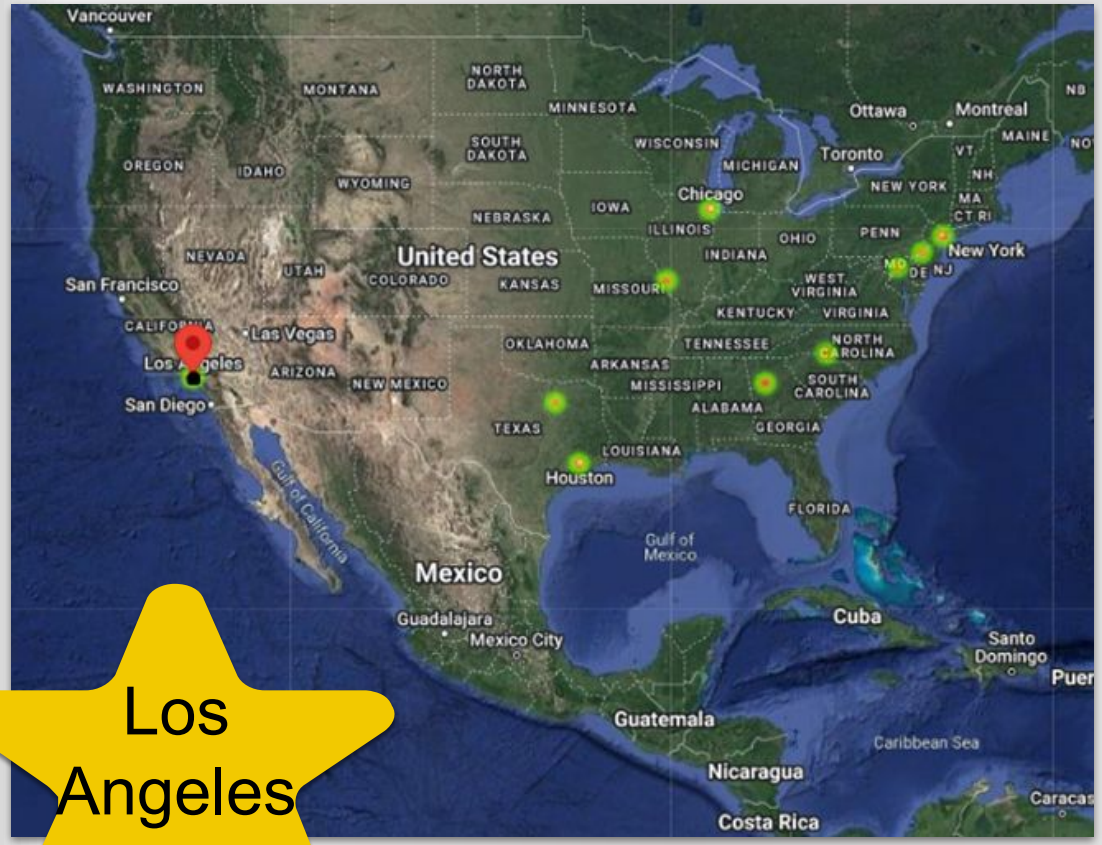
Kentucky

There are 173 College/University where most NBA Players come from
The top 10 are shown here:

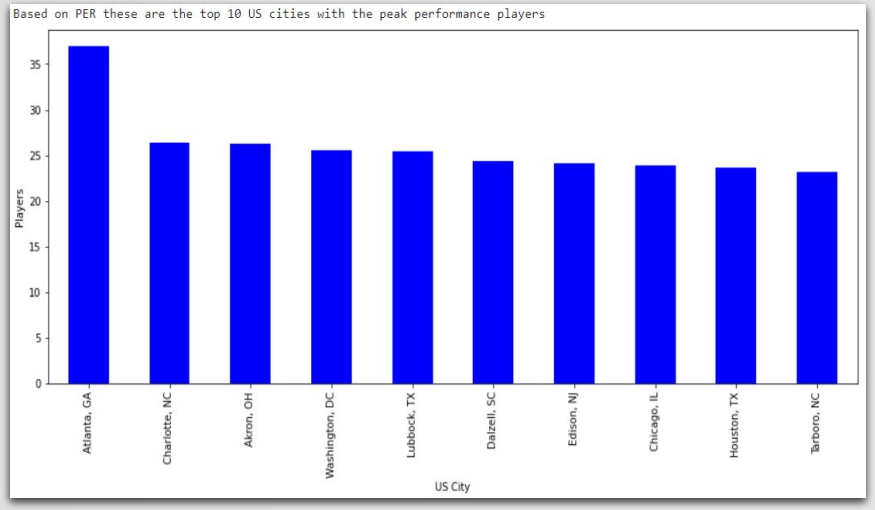


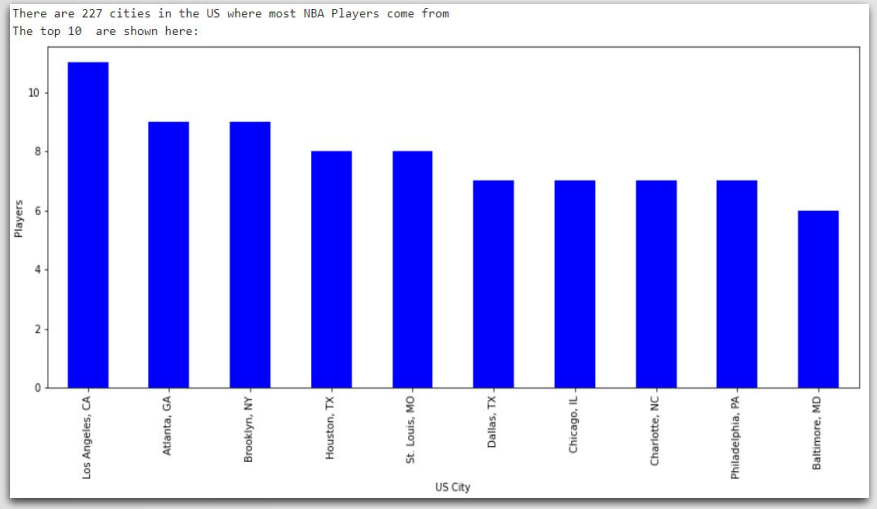


US City

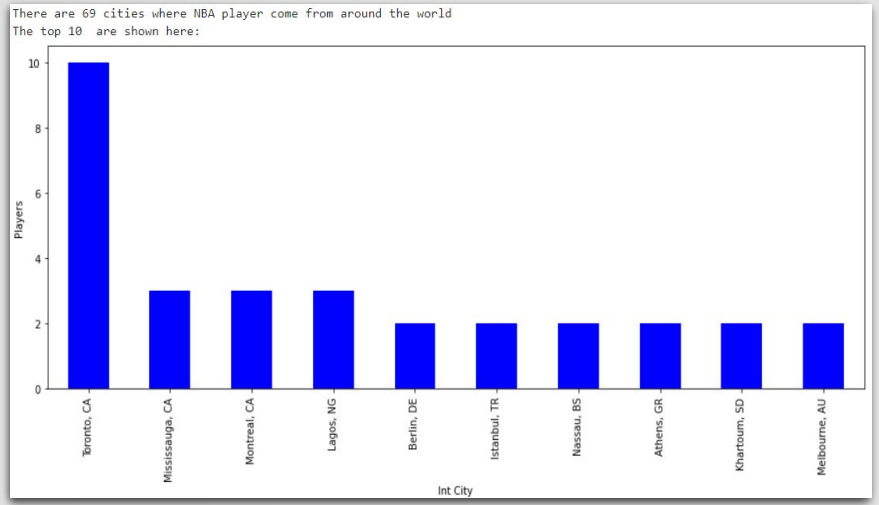


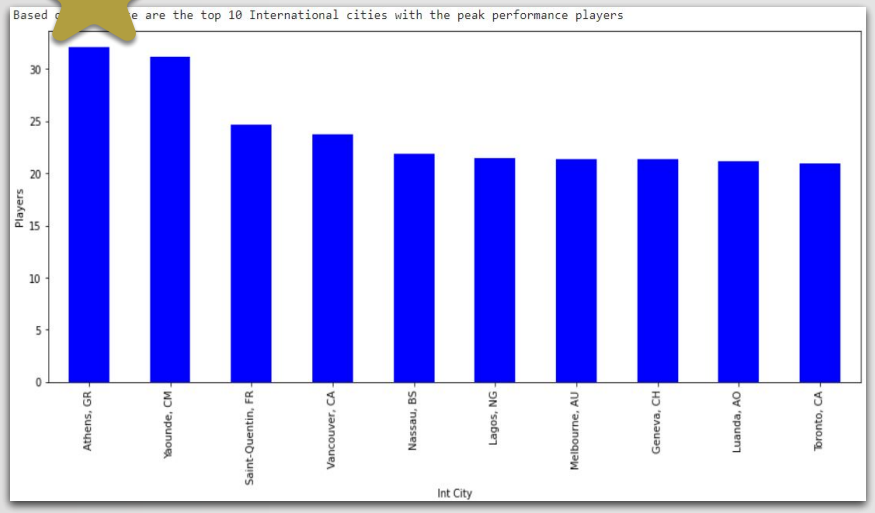
Los Angeles





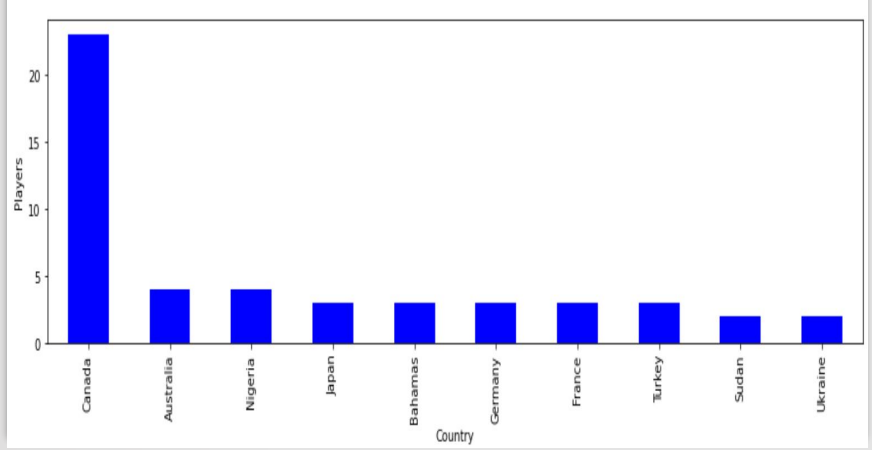
Int. City

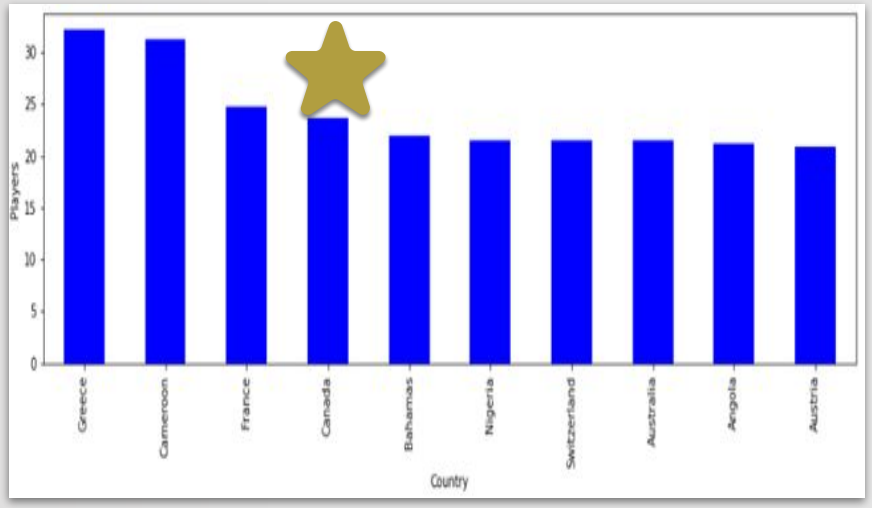




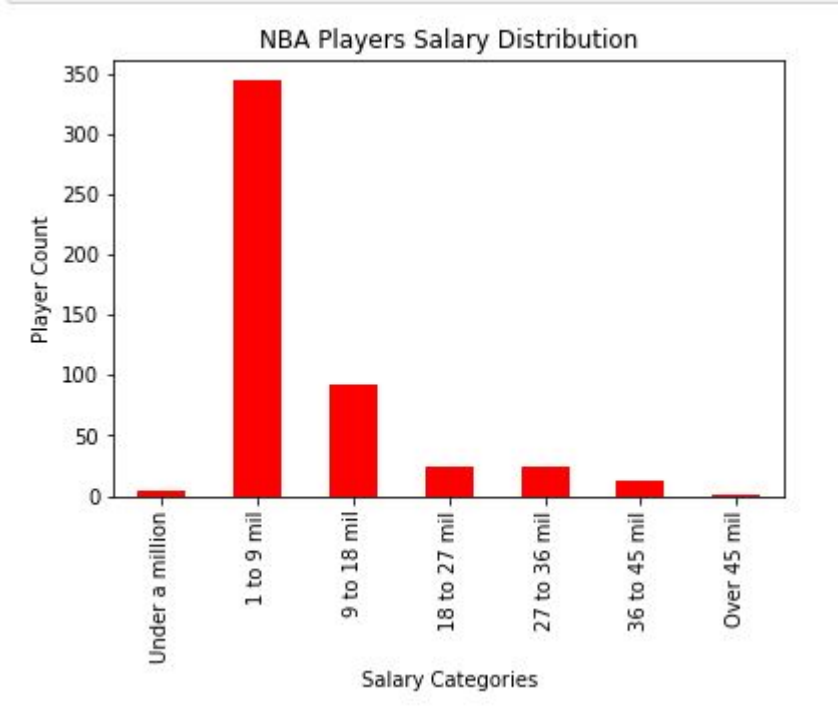
Country

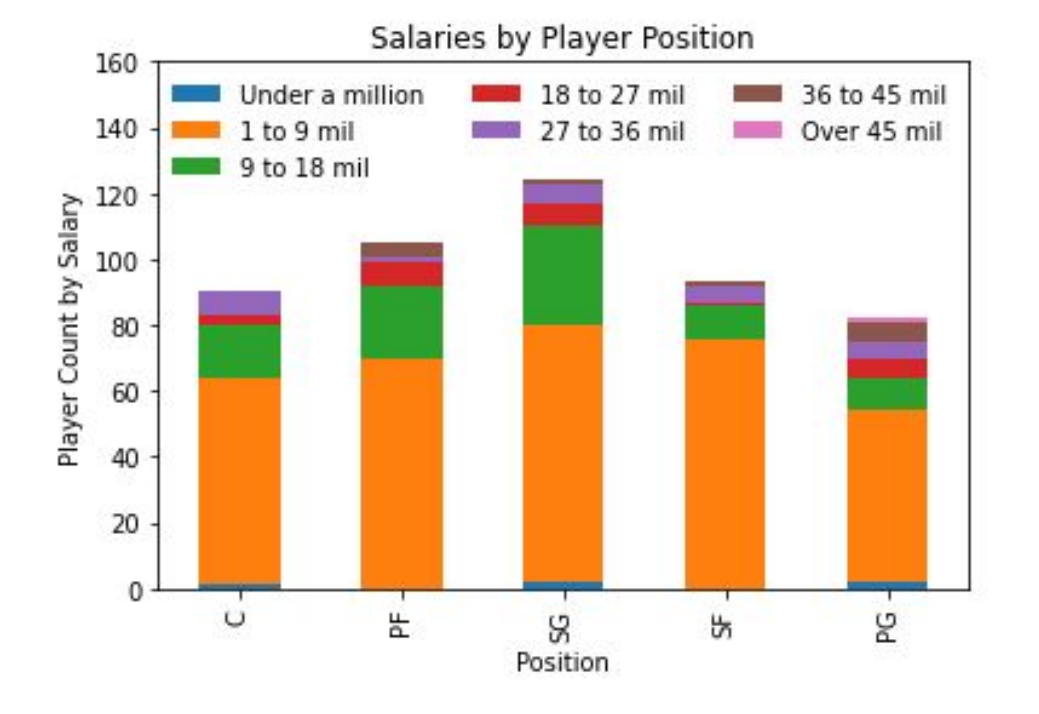
There are 39 countries where most players in the NBA that where not born in the US come from
The top 10 are shown here:



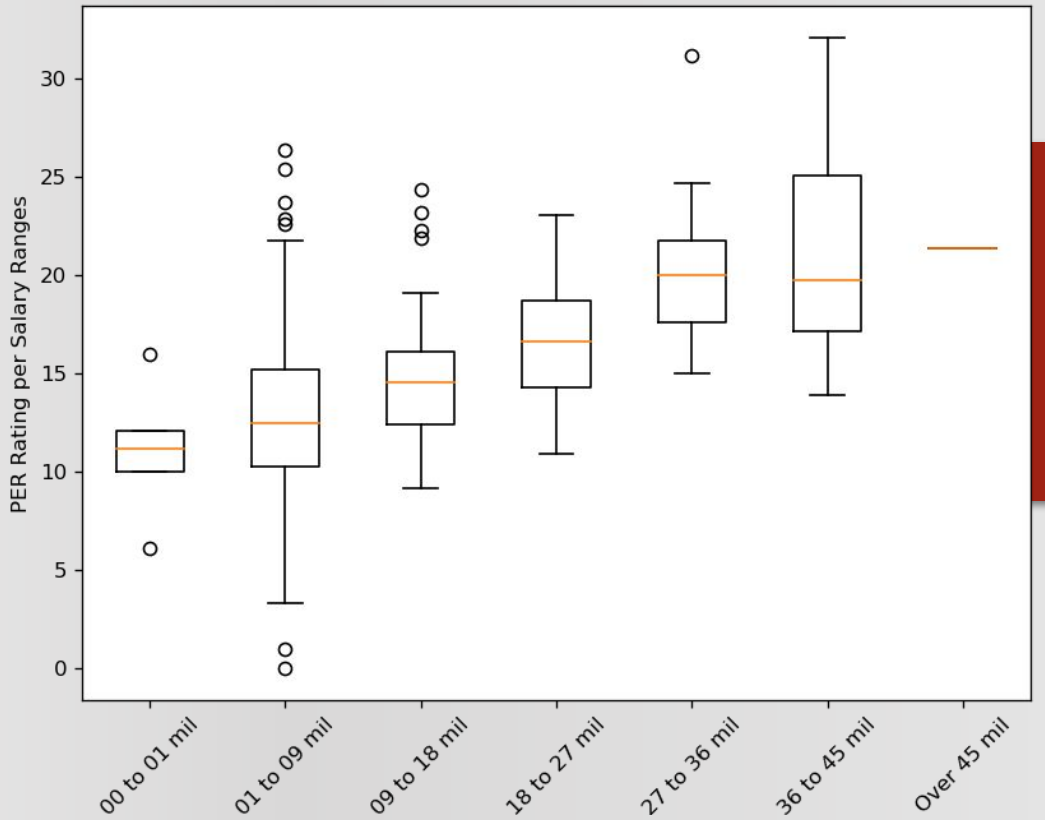


Salary Distributions

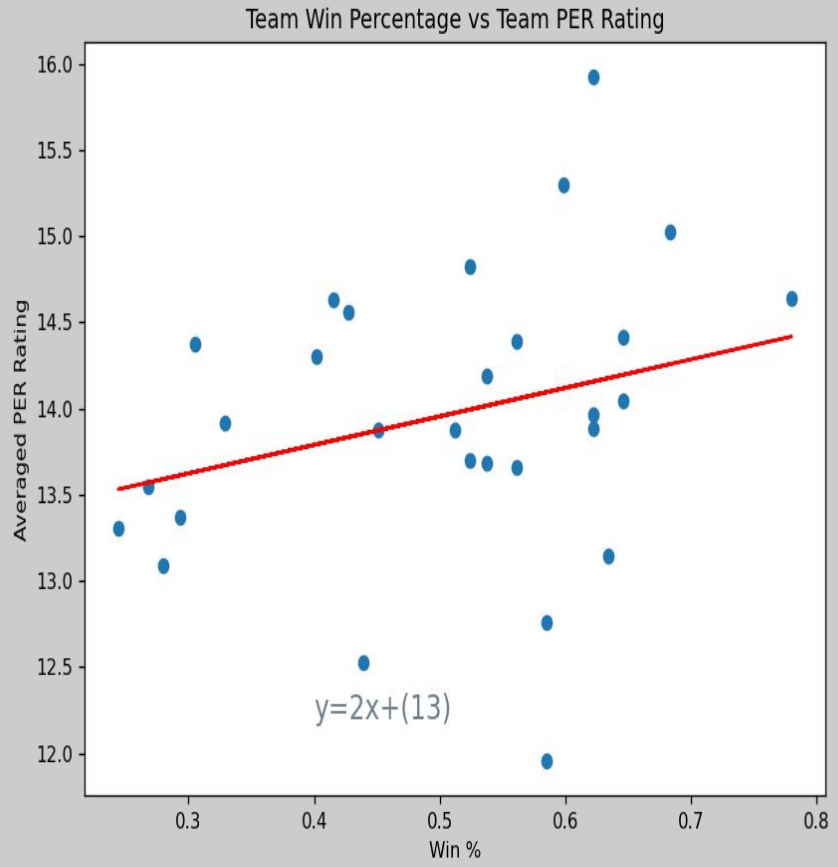




PER vs. Salary



Does PER Work?



Closing Statements

- Exploration of 2021-22 NBA Active Player Data
  - Biometric
  - Draft Pick
  - Origin
  - Salary
- Limitations
- Findings

Stephen Curry