

# Predicting NBA Salary Based on NBA Stats

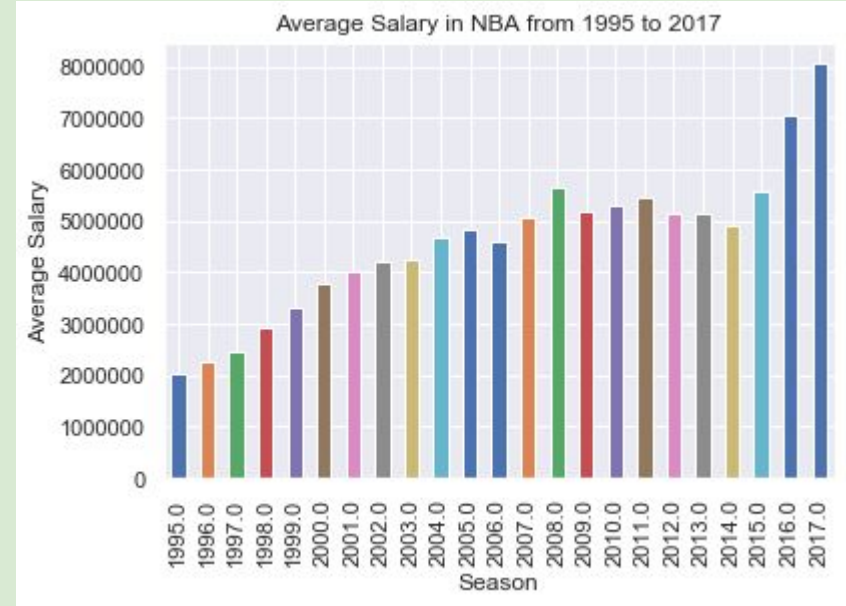
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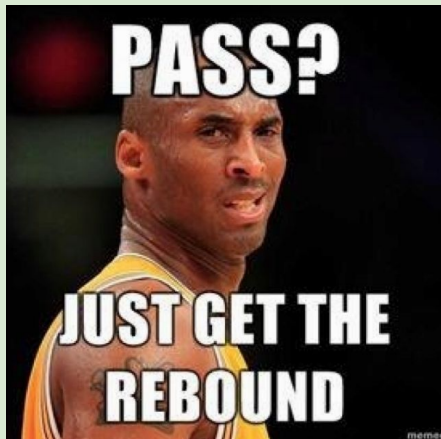
# How much do NBA players make?

- Average NBA player salary: 7.7mil
- Increases as NBA becomes more popular
- Each team has the same salary cap
- Use percentage of salary cap to conduct analysis



# Can we use the performance of players to predict their salary?

- Should Kobe have passed the ball more?
- Should Shaq have improved his FTs?



# Performance vs Salary 2008-2019

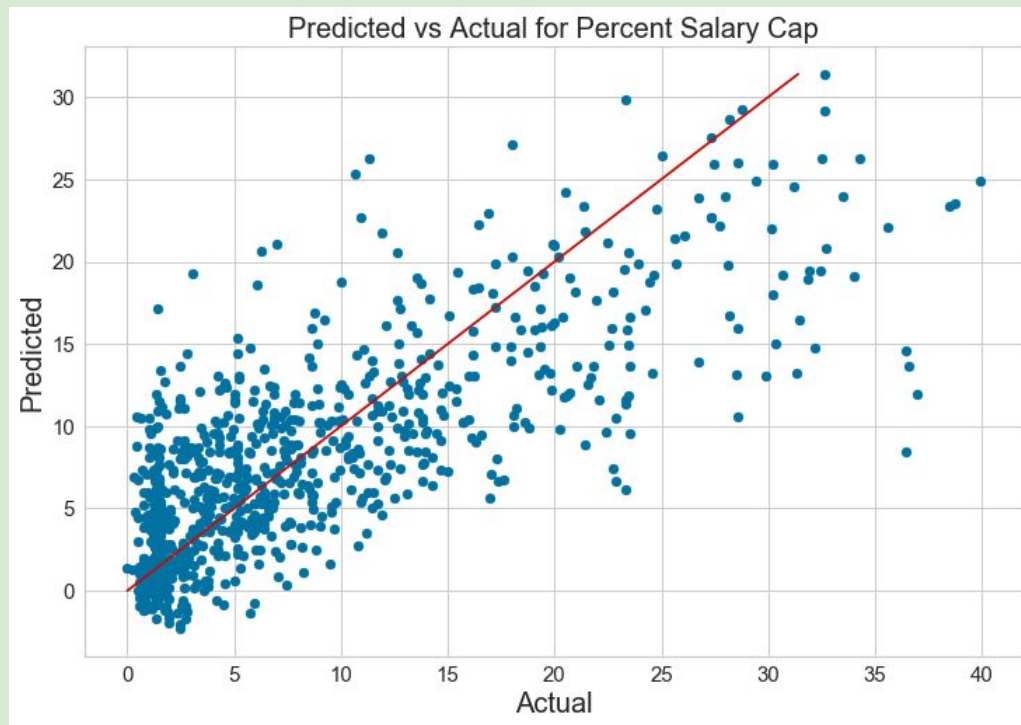
- Top categories that highly correlate with Percentage Cap:
  - PTS: FG, FGA, 2P, 2PA, FT, FTA, MP
  - DRB
  - AST
  - STL
  - AGE



	Pct_Cap
Pct_Cap	1.000000
Age	0.277600
MP	0.592917
FG	0.636111
FGA	0.614017
2P	0.620866
2PA	0.617300
FT	0.588078
FTA	0.593188
DRB	0.562755
AST	0.413779
STL	0.400979
PTS	0.632613

# The Model:

- $R^2$  value: 0.539
- MAE: 4.103
- Larger variance when predicting higher salary
  - Super-star effect



# Future Work

- Use advanced stats to predict percent salary cap:
  - OFF rating, DEF rating, Usage...etc
- Does popularity influence salary
- More data

