Playoff Delusion Before Season Conclusion:

Predicting the final NBA season standings with statistical analysis and machine learning

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2012 games have been played thus far in the NBA season, and with 125 games left, the playoff race has been more competitive than ever. But why wait for results when we could find out the final standings now?

This project aims to use machine learning to predict the final NBA 20/21 standings.

NBA.com for stats

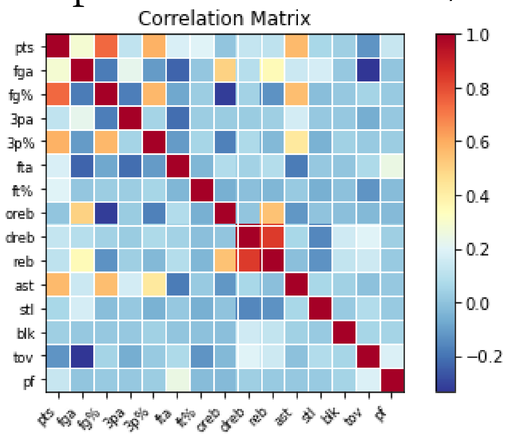
JupyterLab for workstation

Seaborn and statsmodels for data visualization

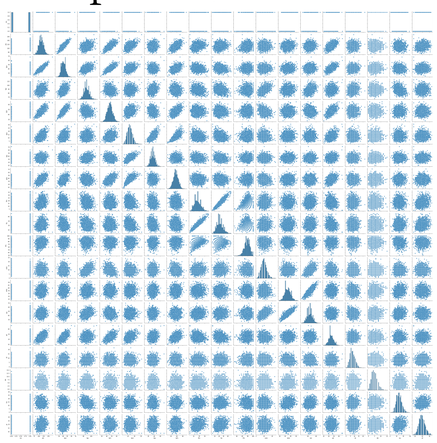
Pandas and numpy for csv reading and data manipulation

SKLearn for prediction models

Graph of correlation w/ all stats.

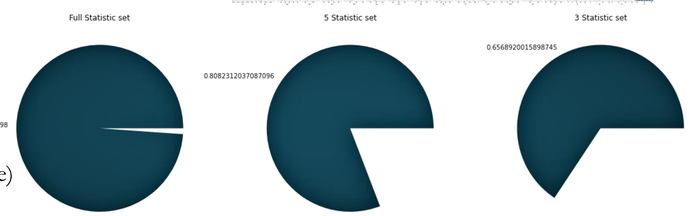


Pairplot w/ All Stats

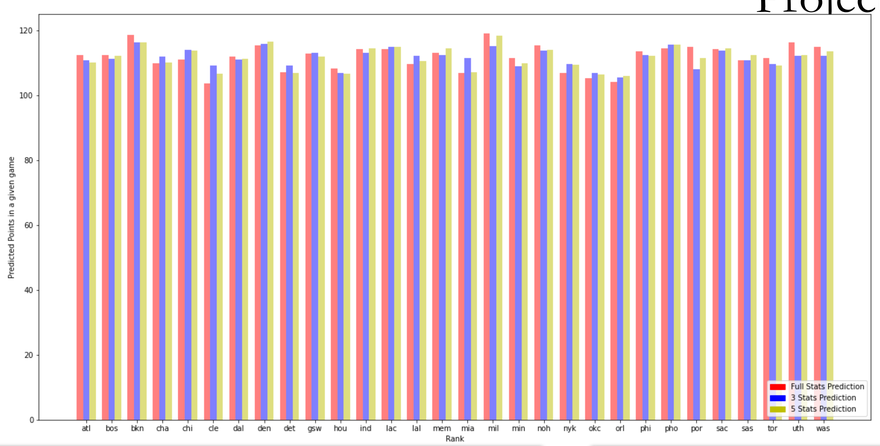


R2 Scores:

(closer to 1 = more accurate)



Projected Points in a game.



The more statistics you use when predicting the total amount of points a team will score, the more accurate the prediction will be.

When using the 3 most important statistics, the prediction is 65% accurate. 5 most important stats, the accuracy jumps to 81%. Using all statistics equals a near 99% prediction accuracy.

In the future, I would like to calculate defensive efficiency to be able to make matchup predictions. Also, add variables for home and away scoring performances and how that affects the prediction models.

NBA.com, matplotlib.org, w3schools.com, scikit-learn.org, stackabuse.com, towardsdatascience.com,

In memory of my brother, who listened for hours about me talking about this.

For Contact Information:

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