

Capstone 3 Project Proposal

Context: Sports analytics is widely used and has been adopted in both professional and amateur sports. Professional sports, especially the NBA have grown in popularity in the past 10 years, and so have their revenues. With this comes a higher expectation to win and to make sure your team (if you own/manage it) make the playoffs.

I will create a machine learning model that will help owners/managers determine which stats to emphasize, players to seek in trades/draft, and how to construct their teams to best win in the regular season, and, to make the playoffs.

Criteria for Success: Identifying the statistics that make a 'winning basketball team.' Identifying what stats make a team successful, from a player perspective.

Scope of Solution Space:

I will have to identify a way for owners/managers to seek out players that will bring out the best in their teams. That means identifying which stats from a player perspective will give them the best chance of making the playoffs and winning, and also which team stats.

Constraint with Solution space: Sports has a lot of data that isn't necessarily important. Almost everything is tracked. I will need to wade through that and make sure I'm capturing important statistics

Stakeholders: Stakeholders for this type of project would be an owner or decision maker in a sports franchise

Key Data Sources:

<https://www.sports-reference.com/>

https://figshare.com/articles/dataset/NBA_data/5414170,

These data sources give me both a look at team stats and player stats. The sports reference data gives me team stats. The figshare data gives me both team and player stats.

I will use both and combine them to make sure the best look at the NBA from the years 2009 - 2016.