

## List of Tasks (from the proposal)

- ~~1. Understanding and using the API to grab data from basketball-reference.com (3 hours)~~
2. Analyzing player stats and exploring data processing and statistical analysis through scikit-learn to represent player stats in a fixed number of dimensions (8 hours)
3. Implementing core algorithm and function to find trades by imagining a new player and matching that fake player to a player that already exists (6 hours)
4. Implementing a simple user interface in Python (1 hours)
5. Testing the model through video game simulation and polling on social media (3 hours)

### 1) Which tasks have been completed?

I have completed understanding and using the API to grab all the data from basketball-reference.com. I am able to retrieve comma-separated values of basketball statistics. This unprocessed data will be the foundation for my project in the future.

### 2) Which tasks are pending?

The rest of the tasks are pending, but I have started to analyze and explore the data with scikit-learn. I have been looking at the data through pandas in Python. The method I have decided to use is Singular Value Decomposition/Principal Component Analysis to reduce the dimensionality of the basketball statistics. I have gotten familiar with the sklearn.decomposition.PCA method and have applied it to a smaller subset of the whole data.

### 3) Are you facing any challenges?

I have not faced any glaring challenges yet.