

Names:

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Fantasy Football Rankings Predictor

The purpose of our research stems from a hobby that many people in the United States have in common. Fantasy Football is known for having a lot of discrepancies from year to year. Our objective is to use data from certain NFL wide receivers, specifically, the variables that have the strongest relationship with their overall fantasy football rankings.

Topic: Relationship between specific football statistical points and fantasy football rankings.

Data Set: <https://www.fantasypros.com/nfl/reports/leaders/wr.php?year=2020>

Data Source: <https://www.fantasypros.com/>

Heilmaier's questions:

1. Our objective is to use certain data points, compare them to the success of wide receiver's fantasy football output. We will then use those comparisons to try and accurately predict the next year's fantasy production rankings for wide receivers.
2. Today a lot of people rely on different applications to predict the overall productivity of each player. Each major fantasy platform has scoring projections and positional rankings, none of the major platforms attempt to predict the end-year rankings by using a data set. The limits of the current practice are centered around the possible biases in major platforms' predictions and rankings; they often refer to this as the "eye-test".
3. Our approach is to just utilize data points from last year and use those to predict the final rankings, we will not include any categorical data, just numerical. Our plan will be successful because we are just using numbers, taking certain biases out of the predictions.
4. The people who will benefit/care most from our analysis are individuals who play fantasy football. Roughly 40 million people every single year partake in fantasy football. The analysis is important because it can aid people to help them win their respective fantasy leagues.
5. There are many websites and companies that focus on the analytics of fantasy football. In fact, ESPN, the world's biggest sports media outlet, has a whole separate section for their fantasy sports analysis. If the model we create becomes an accurate model the business implications are infinite, and also opens a new door for the use of advanced analytics in sports.

6. There are not many risks involved because predicting the outcome of fantasy weeks is such a popular topic.
7. There will be no cost associated with this project, as all the information we use is in the public domain, meaning anyone can use it.
8. Throughout the process of the NFL season we will look at our model and compare it with the actual outcomes of the players.
9. Since this is a collaborative programming project we have decided to use git. Through github, we can manage/track when we push to our specified repository. This will give us a breakdown of our progress, and allow us to track it.

Data Name and Source:

- The data set is a CSV file named Fantasy_Football_Advanced_Analytic_Grade_Ranker.csv and it comes from a website named Fantasy Pros.

Machine Learning Algorithm:

We are using a supervised type of machine learning algorithm, specifically prediction. This is because we are using labeled datasets to train different algorithms to classify data or predict outcomes correctly. Every week we will input data into our model, and it will adjust it and fit it appropriately.