Abstract

In the new age of daily fantasy sports (DFS), fantasy football has become an enormous revenue generator for DFS sites, such as DraftKings and FanDuel. Both companies are valued over $1 billion. However, previous analysis done by popular DFS site Rotogrinders, has shown that only the top players are consistently winning, the top 10 players much more frequently than the remaining 20,000 players. Using complex statistical models they're able to identify top athletes and value picks (based on an athlete's draft 'salary') that the average player might not be aware of. There is a need to evaluate which methods and algorithms are best at predicting fantasy football point output. These methods could then be applied to future DFS contests to see if they can predict other fantasy sports as well. There are few resources available on this subject, as DFS are still relatively new and few people publish their work, since they generally develop these models for their own financial gain. This research will attempt to find some effective statistical models to predict the weekly fantasy point output of a quarterback.

**Index Terms**

Computer Science  Information Sciences

**Keywords**

Fantasy football, daily fantasy sports, statistical models, machine learning, predictive analytics, DraftKings, FanDuel.