

New Season-Long Fantasy Football Model Predicts Team, Player Performance, Likely Leading to Wins for Online Fans

ALEXANDRIA, VA (August 29, 2016) – Just days away from the start of the National Football League’s (NFL) 2016 regular season, a new fantasy football method predicting team and player performance could spell victory for online participants.

Recently featured in the [Journal of Quantitative Analysis in Sports](#) (JQAS), the work of Adrian Becker, co-founder and vice president of research and development for Dynamic Ideas LLC, and Xu Andy Sun, professor in the Stewart School of Industrial and Systems Engineering at Georgia Tech University, consists of an approach known as a mixed integer programming (MIP) model that uses predictions for draft selection as well as weekly lineup management, incorporating the entire objective of winning a fantasy football season.

“Numerous websites specialize in reporting NFL games, providing preseason rankings, fantasy point projections, team and player statistics, and expert draft opinions. Yet, despite the vast popularity of the game, the intensive analysis by experts, and various online tools that offer prediction for the values of players, up to now there has been no method that provides a comprehensive strategy for the entire Fantasy Football season,” note the authors.

To test the accuracy of their model, Becker and Sun use data from the 2004-2006 seasons and simulate the 2007 and 2008 seasons. “The end result is encouraging, and shows an edge of our method over the conventional strategy,” they write.

According to a 2016 report issued by the Fantasy Sports Trade Association, the number of individuals participating in fantasy sports in North America has risen to 57.4 million.

Recognizing that participants (also known as “owners”) have limited time to select a draft pick, Becker and Sun’s unique model is designed so that “the MIP formulation can be solved very efficiently, which is crucial for an online environment” – particularly important as data from the FSTA shows that owners prefer to manage their fantasy sports lineups using a variety of emerging mobile devices.

Outside of fantasy sports, Becker and Sun’s model shows potential for use by real-world general managers, who, though they must consider non-fantasy football factors such as salary cap, multi-year contracts, player characters, and team chemistry (that are not present in fantasy football), could benefit from applying this statistical approach to their decision-making process in filling positional needs or making trades.

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About the Journal of Quantitative Analysis in Sports

An official journal of the American Statistical Association, the *Journal of Quantitative Analysis in Sports* (JQAS) publishes timely, high-quality peer-reviewed research on the quantitative aspects of professional and amateur sports, including collegiate and Olympic competition. JQAS seeks to publish manuscripts that demonstrate original ways of approaching problems, develop cutting edge methods, and apply innovative thinking to solve difficult challenges in sports contexts. Articles come from a wide variety of sports and diverse perspectives, and address topics such as game outcome models, measurement and evaluation of player performance, tournament structure, analysis of rules and adjudication, within-game strategy, analysis of sporting technologies, and player and team ranking methods.

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