

Validate NBA 2015-2019 Regular Season MVP Winners

Lily Sun
OHS Stanford, Palo Alto, USA
lilysun@ohs.stanford.edu

Mason Chen
OHS Stanford, Palo Alto, USA
mason05@ohs.stanford.edu

Abstract

This project is to build statistical models to validate who should win 2015-2019 regular seasons' NBA Most Valuable Player (MVP) Award. Prior building the MVP models, the player statistics data has been Z-standardized to remove any mean and standard deviation bias. The "Uniform MVP Index" has been derived from combining each player's Z statistics with equal weight. Team has further derived a "Weighted and Subset" model by adding the weight factor and the best subset feature selection. Authors have added the "Team Winning" factor in the Power Model from power= 0 (equivalent to the Weighted Model), 0.5,1,1.5 to power=infinity (MVP from the best Team). The Power MVP Index will be multiplied by the power of the team winning% in the Power model. Based on the Validation of 2015-2019 Seasons, there is no single MVP model could determine the MVP winner from year to year.

Keywords

Statistics, Data Mining, JMP, Modeling, MVP