Title

Predicting College Football Recruits by using Machine Learning Techniques

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Abstract

College football is big business. To create a winning team that will continue to generate revenue, Division I Football Bowl Subdivision (FBS) Power Five schools need to choose their recruits wisely. Recruits are selected based on certain player attributes. Power Five schools are the most frequented schools by NFL scouts, making these schools highly desired by recruits. In this regard, we built a model to predict whether a high school recruit will commit to a school in one of the Power Five Conferences. Such a model could allow a school to optimize its recruiting process, maximizing its return on investment. We used our dataset to fit several machine learning  models. We determined the Random Forest model produced the best results when applied to the testing set, as it splits observations using only the most influential predictor from a subset of the predictors for each internal node and decorrelates its produced trees. This model revealed which particular attributes are indisputably the most important  predictors of commitment to a Power Five school. Based on our findings, we think this model could be successfully used to improve the recruiting process.