**Football Performance Statistics**

 I enjoy watching football. In fact, I enjoy it so much that I spend a significant amount of time reading about it every week. I read lots of articles that are focused on statistics, however, there are not many singular statistics that are an accurate measure of player performance. One player performance statistic is DVOA, defense-adjusted value over average, which is a decent measure of player performance, but it does not take into account certain important factors, such as game situation. I would like to create a statistic that is an even better measure of all-around player performance. I also would like to build a projection system, which can use the statistic to project a player’s numbers in more traditional statistics such as rushing yards, passing yards, receiving touchdowns, etc. Since football is such a team sport, where each player is so heavily reliant on other players to do their job in order for him to succeed, it is hard to measure individual player performance, so that is one challenge I will face. I would use python to build both the projection system and the generator for the statistic. I will have to test out multiple different formulas in order to see how the statistic weights the different inputs. One thing that I hope for the statistic is that it might make it easier to compare players over different generations, because traditional statistics have become inflated in recent years due to rule changes that favor the offense and lead to more raw production, especially in the passing game. Some possible approaches I will take are starting with player performance statistics such as DVOA and AV, approximate value, and making slight variations on those to see how they are affected then going from there. If that does not go over how I would like it to, I can start from scratch using a formula all of my own. If coming up with a performance statistic and projection system for all players proves too challenging, I can focus specifically on offensive line play, since there are very few statistics that measure an offensive lineman’s performance.