System Description:

Project Goal

We want to create an AI algorithm that creates a better and consistent win percentage over any of its “bracket-picking” competitors.

Approach

We plan on creating an open-source Python project to develop a linear regression model that looks at very broad March Madness statistics, creating training and testing data to develop the most accurate game simulator as a combination of those stats. Some examples of these statistics include a team’s shooting percentages, turnover rates, and foul shot percentage. By finding the best combination of these statistics, the grouping of the ones with the greatest win percentages, we should be able to create a tournament simulation that does better than its competitors.

Competing Projects

Other attempts have been made to analyze matchups and predict games, but we have found that none of the existing open-source models are able to make predictions better than average. An example of a model that is not open source is ESPN’s smart-bracket autofill option when filling out a bracket for their tournament challenge.

Project Status and Roadmap

We have completed version 1 of the simulator and are currently comparing our results with the ongoing March Madness tournament. Once the tournament is complete, we will evaluate our results and determine if any optimizations can be made to our program. We plan to allow the user to make more of the decisions about how many brackets to create and how much variance the brackets have from one another. We could also allow a user to select a champion before the brackets generate, so they could pick their favorite team and build a bracket around that.