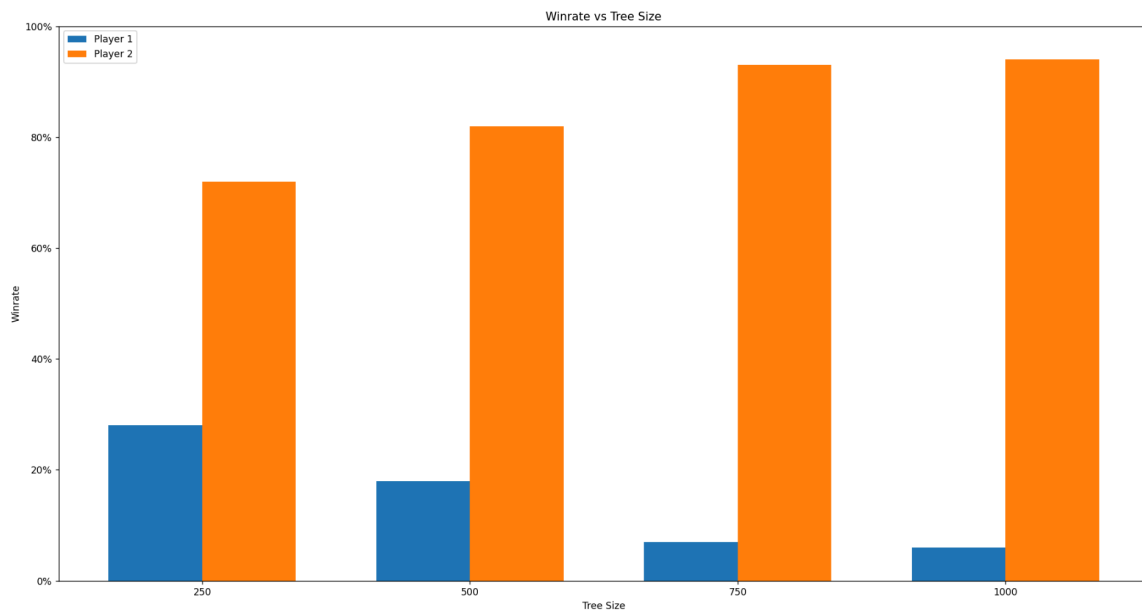


Experiment 1 had us pit two versions of a typical Monte Carlo tree search AI against each other in a game of ultimate tic-tac-toe using different numbers of nodes in each tree. Player 1 was fixed to 100 nodes/tree while player 2 was used with various different sizes of nodes/tree. Below are the results from 100 games using the various nodes/tree:



Our results seemed to cap out around using 750 nodes/tree, where using more nodes did increase the winrate, but the win percentage only slightly increased past that point. The speed of the program got increasingly slower with more nodes, so our bot should be run at around 750nodes/tree in order to maximize winrate without having each calculation take too long. At 1000 nodes/tree our bot usually had around a 95% win rate. Overall this program ran for 42 minutes to produce these results.