

## Lab 2 Report – Kyle Marek

I think that although both increasing search depth and improving the evaluation function are important to the ability of the Alpha-Beta pruning to work that improving the evaluation function is more important. Increasing the search depth can allow the game playing agent to see more moves in advance, however there is a point of decreasing return where going one more move deeper will not really affect which move will be chosen. However, if the evaluation function is bad, no matter what the depth of the search is, the game playing agent won't choose the best move.

I made a method that allows the AI to play against itself and I tested different depths as well as evaluation functions and that is what I determined.