

CS326 Final Project Proposal

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1. We will make a rudimentary chess bot utilizing the Java library “chesslib”(<https://github.com/bhlangonijr/chesslib>). This library provides essential chess operations such as building the board, checking board states, managing moves, and more. This bot would be used more for puzzles as the start of a chess game is often very even. We could use a method to get around this.
2. We could apply either one of the two algorithms: Monte Carlo Search or Minimax with Alpha Beta Pruning in order to look into the future for best upcoming moves. We are in favor of alpha beta pruning to cut down computing time as much as possible. We may have to alter our existing algorithm to be useful for chess purposes. The main complication will be accurately deciding what moves are better than others. Along with alpha beta pruning a maximum depth may be needed as there might be too many branches in the decision tree. (Monte Carlo Search may be easier to implement)

Please let us know if you think this problem is too complicated or is within reason. We will continue to look at other ideas in case this is too large of a task.