

	Performance for 100 rounds in seconds		
	Greedy Agent	Random Agent	Minimax Agent
Iterative deepening (ID) with Alpha Beta and fair match heuristic	80%	85%	54%
ID with Alpha Beta and offensive score heuristic	72%	87%	59%

Advanced Heuristic

What features of the game does your heuristic incorporate, and why do you think those features matter in evaluating states during search?

My heuristic focused on moving to the opponents spot before they had a chance. I based it on the killer heuristic but I don't think I implemented it correctly since the performance did not increase as much as I hoped. I think if implemented correctly, it would matter more because I could remove the number of moves that the opponent would have since my agent would be doing their moves.

Analyze the search depth your agent achieves using your custom heuristic. Does search speed matter more or less than accuracy to the performance of your heuristic?

See how the increase of time affected the accuracy. Results in command line.

In my case, the search depth itself would not matter as much as a combination of search depth and time. If I increase the search depth and time, it would matter a lot more because my heuristic is focused on the overlap of moves between my agent and the opponent rather than the accuracy. When I increased the time and depth, my agent had better performance against minimax and random agent.