

Project 1 Report

Theory of Computer Game

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1 Method and Improvement

The method I use for this game is monte carlo tree search with root parallelization. Total number of simulation is set to 1350 and every thinking time is limited to 3 seconds in order not to exceed the total thinking time 40 seconds in a game. This agent can reach 100 winrate against to weak judge. While againsting with medium and strong one it not performed well. I have tried to do RAVE, but the result is worse than the default one. I have not figured it out why.

2 Experiment

Winrate is calculating by playing 50 games with judges.

Every agent runs 1350 simulation and thinking 3 seconds per action.

method	weak	medium
Default	94%	20%
2 parallel	100%	35%
4 parallel	100%	48%