Monte-Carlo Tree Search for Multi-Player Games

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Statements

belonging to the thesis

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1. Though max^n is generally outperformed by paranoid and BRS in the minimax framework, it is a better choice for a search policy in multi-player MCTS (this thesis, Chapter 4).

2. Progressive History should be considered as an alternative to the all-moves-as-first heuristic (this thesis, Chapter 5).

3. Two-ply searches in the playout phase of multi-player MCTS may increase the playing strength significantly, even at the cost of less playouts (this thesis, Chapter 6).

4. Considering yourself to be more important than your collaborators in a fixed coalition can be quite beneficial for everyone (this thesis, Chapter 7).

5. Coalitions in multi-player games have more in common with psychology and sociology than with Artificial Intelligence.

6. Robots will never be indistinguishable from humans.

7. The pinnacle of Artificial Intelligence is to make intelligent behavior emerge from a simple algorithm.

8. Often, the only reason why computers are better than humans at games with imperfect information is because they have a better memory, not because they have a better strategy.

9. When studying how computers play games, playing computer games may be a welcome diversion.

10. Ph.D. research is like a sudden-death game; it is over before you know it.