Advanced Search in Chess

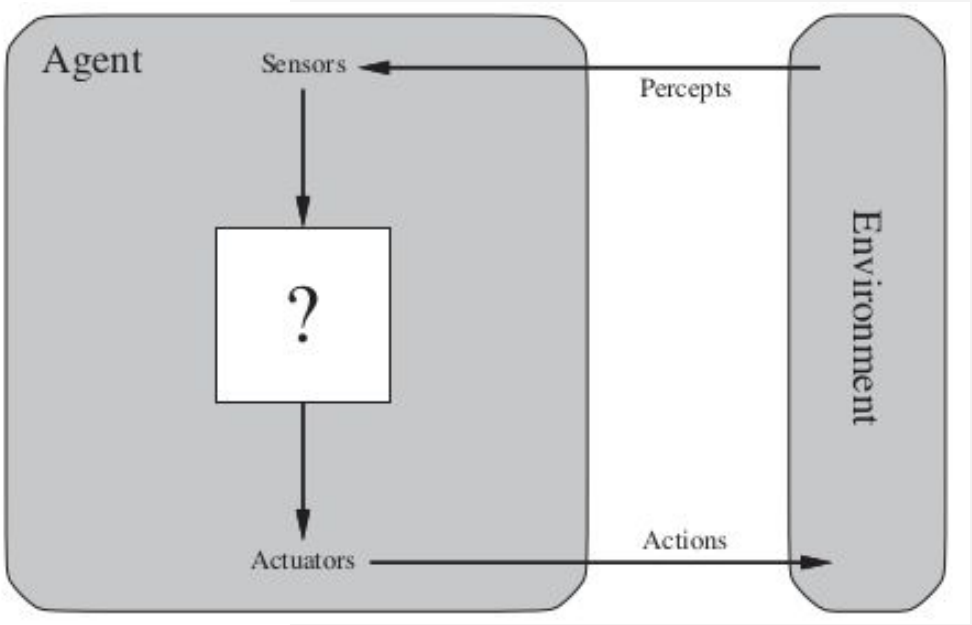
Contents

1. Intelligent Agents

What is an Intelligent Agent?

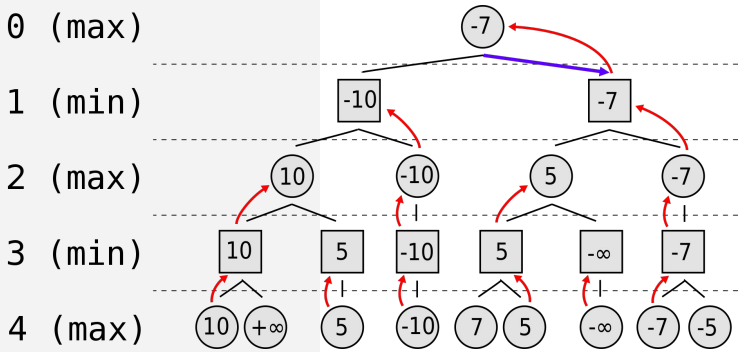
An agent is an entity that **perceives** its **environment** and it needs:

- Sensors, to perceive the environment
- Actuators, to emit a response based on its perception



Agent Interaction. Retrieved from the book ***AI a modern approach*** by **Russell and Norvig**.

2. Advanced Search: Minimax



What is Minimax?

- Algorithm that minimizes the maximum loss.
- The algorithm recursively traverse its child nodes looking for the optimal state.
- It needs an **utility** function to measure the values of each state.

3. Chess

How to weight a chess table?

Sum the weight of the pieces that are present in the table in the current state given the equivalences shown in the left table.

p.d.: This is our **utility** function.

Demo

Thanks!

questions?

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References

- AI a modern approach. Third Edition. Russell & Norvig.
- A step-by-step guide to building a simple chess AI. Retrieved from https://www.freecodecamp.org/news/simple-chess-ai-step-by-step-1d55a9266977/