
Introduction to Artificial Intelligence Lecture Notes

Lesson I - Week of October 10th
Stanford Online Course, Fall 2011



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13th October 2011

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1 Unit 1

1.1 Purpose of this Class

- to teach you the very basics of artificial intelligence, so you can talk and understand the basic tools of the trade
- to excite you of the field

1.2 Structure

1. Videos
2. Quizzes
3. Answer videos for the quizzes and exams before
4. Assignments or Exams¹

1.3 Mini Quiz

An AI program is called...

- ☐ Wetware
- ☐ Formula
- ☐ Intelligent Agent

Answer:

The last item is the right one

1.4 Intelligent Agent

We have an intelligent Agent, which interacts with the environment as seen in Figure 1. The Agent can perceive the state of the environment through its sensors and it can effect its state through its actuators.

The big question is the function which maps sensors to actuators. That is the control policy for the agent. This whole class deals with how the agent makes decisions which it can carry out with its actuators based on past sensor data.

These decisions take place many times in the loop of the environment feedback, this is called the **Perception Action Cycle**.

¹Please see ai-class.org

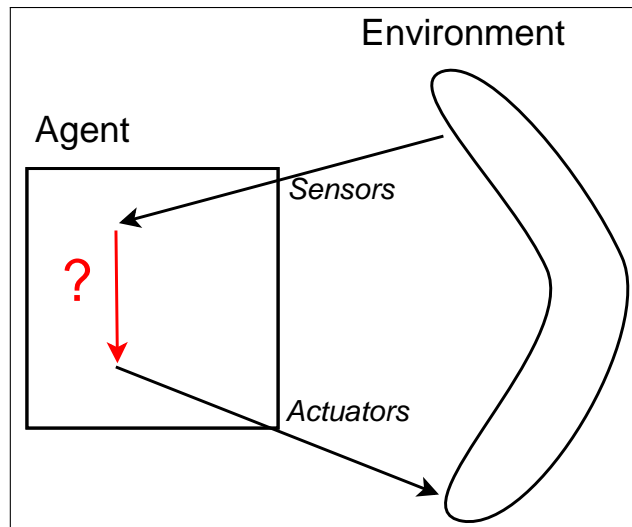


Figure 1: Intelligent Agent: Perception Action Cycle

1.5 Mini Quiz

AI has successfully been used in (choose one or more)

- ☐ Finance
- ☐ Robotics
- ☐ Games
- ☐ Medicine
- ☐ The Web
- ☐ None of them

Answer:

All except the last

1.6 AI in Finance

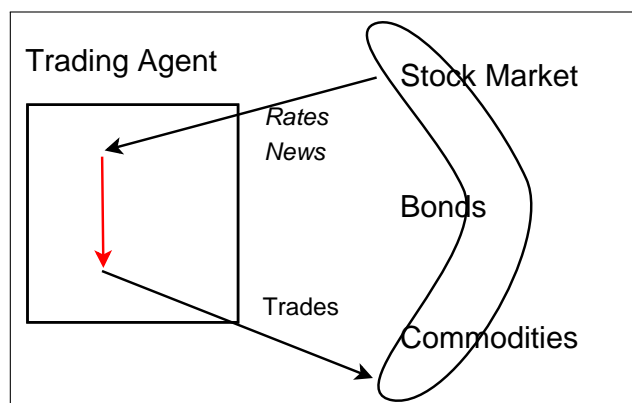


Figure 2: AI in Finance