

Notes

Russell & Norvig

Artificial Intelligence: A Modern Approach

	Humanly	Rationally
Thinking	Cognitive Science	(Not very useful)
Acting	Turing Test (too hard)	YES

Acts so as to achieve the best outcome, or, where there is uncertainty, the best expected outcome

An Agent receives percepts through its sensors, and can cause an action through its actuators.

- Performance
- Environment
- Actuators
- Sensors

Observable

- Fully Observable: Can view all of the environment
- Partially Observable: Can view some of the environment
- Unobservable: Cannot view any of the environment

Single Agent/Multi Agent

Multi Agent

- Competitive
- Cooperative
- Semi cooperative

Determinism

- Deterministic: Every action causes predictable results
- Stochastic: Actions cause unpredictable results

Dynamics

- Static: Nothing happens until an action occurs

- Dynamic: Environment changes while waiting for action
- Semidynamic: Performance ranking is affected by time spent thinking

Discrete/Continuous

Known/Unknown

Types of agents

- Reflex
- State-based
- Goal-based
- Utility-based
- Learning
- Exploration vs Exploitation