

# An introduction to Artificial Intelligence

CE-40417

Lecture 2: Intelligent Agents  
Ramin Halavati (halavati@ce.sharif.edu)

*In which we discuss what an intelligent agent does, how it is related to its environment, how it is evolved, and how we might go about building one.*

## Outline

- Agents and environments...
- Rationality
- Environment types
- Agent types

## Agents

- An **agent** is anything that can be viewed as **perceiving** its **environment** through **sensors** and **acting** upon that environment through **actuators**
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- Human agent: eyes, ears, and other organs for sensors; hands, legs, mouth, and other body parts for actuators.
- Robotic agent: cameras and infrared range finders for sensors; various motors for actuators.

# Rational Agent?

- What action makes the agent more successful.
- How to Evaluate?
  - Internal / External
  - You'll get what you seek
- When to Evaluate?