Agents acting in an environment

- prior knowledge
- past experiences
- goals/values
- observations

Agent

Actions

Environment

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Central hypotheses of CI

Symbol-system hypothesis:

➢ Reasoning is symbol manipulation.

Church–Turing thesis:

➢ Any symbol manipulation can be carried out on a Turing machine.
Artificial or Computational Intelligence?

- The field is often called **Artificial Intelligence**.

- **Scientific goal**: to understand the principles that make intelligent behavior possible, in natural or artificial systems.

- **Engineering goal**: to specify methods for the design of useful, intelligent artifacts.

- Analogy between studying flying machines and thinking machines.

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