

## Definition of Intelligence

- key capabilities of intelligent systems
  - Perceive
    - \* senses
    - \* sensors
  - Think
    - \* brain
    - \* memory
      - ◆ database of facts
    - \* knowledge representation
      - ◆ understanding concepts
      - ◆ general knowledge representation
    - \* reasoning via rules/logic/etc.
  - Act
    - \* human body
    - \* actuators
- 5 types of intelligence
  - think like a human
    - \* humanity is the goal
    - \* focus on information processing rather on action
    - \* interesting for understanding how humans think
      - ◆ biology, neurology, psychology
  - act like a human
    - \* humanity is the goal
    - \* not particular useful in engineering
    - \* can be identified by Turing Test
  - think rationally
    - \* focus on information processing rather on action
    - \* assumes that intelligence = rationality
  - act rationally
    - \* behaviour dependent on concrete goal(survival)
    - \* assumes that intelligence = rationality
  - adapt to your surroundings
    - \* capable of adapting to changing environment
    - \* respond to changes with own interactions with environment

[[Data Science and AI]]