

WEAK AND STRONG AI

- Weak artificial intelligence (weak AI), or narrow AI is focused on one narrow task.
- Example: Data science is
 - Inter-disciplinary field
 - Uses scientific methods, processes, algos, and systems
 - to extract knowledge and insights from structured and unstructured data.

- Data Science is related to Data Mining and Big data
- Analyzing, understanding, and making informed decisions on humongous amounts of data, impossible to handle manually (machine learning,

- Clearly, whether AI is impossible depends on how it is defined.
- WE have defined AI as the quest for the best agent program on a given architecture. With this understanding AI is possible.

- Al was founded on the assumptions that the weak Al is possible.
 Other disagree
- 2. Can machines act intelligently?
- 3. The question of whether machine can think is about as relevant as the questions of whether submarines can swim

EXAMPLES: WEAK AI

- 1. Submarines Can Swim ." SWIM?
- 2. Dictionary meaning is:

To move through water by means of the limbs, fins, or tail," . wings or wing like parts (fly)

- 1. Thinking machines
- 2. Computing Machinery and Intelligence

VIRTUAL ASSISTANT (CHATBOTS)

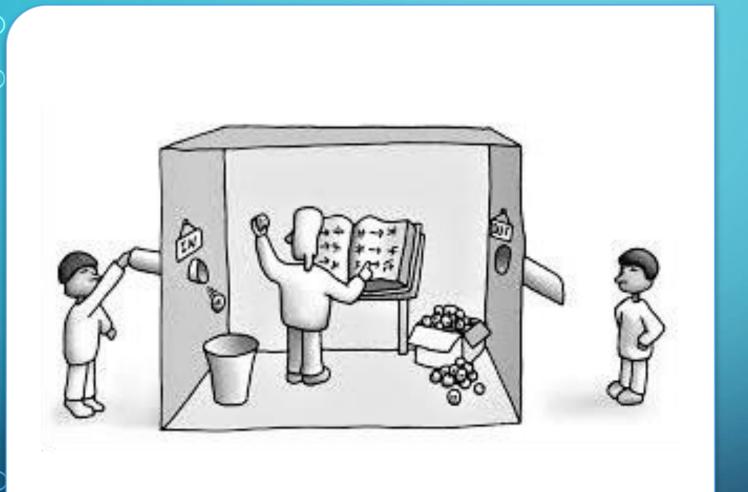
- 1. ELIZA program
- 2. Internet chatbots
- 3. MGONZ
- 4. NATACHATA
- 5. CYBERLOVER
- 6. Siri

STRONG AI: CAN MACHINES THINK?

- Strong AI is defined as a Machine with the ability to apply intelligence to any problem, rather than just one specific problem, sometimes considered to require consciousness, sentience (feels, perceive, experience subjectively) and mind.
- Ability to think vs. ability to feel

ON TURING AND HIS THOUGHT

- Many philosophers have claimed that a machine that passes the Turing Test would still not be *thinking* but would be only a *simulation* of thinking.
- Turing calls this the argument from consciousness—the machine must be aware of its own mental states and actions.



CHINESE ROOM EXAMPLE

- 1. It takes Chinese characters as input, produces other Chinese characters as output
- 2. Person ask questions, it makes appropriate responses so that other person would be convinced that they are talking to another speaking Chinese

WEAK AI VS STRONG AI

- The assertion that machines could act as if they were intelligent is called the weak AI hypothesis by philosophers,
- The assertion that machines that do so WEAK AI are thinking (not just simulating thinking) is called the strong AI hypothesis.
- Most AI researchers take the weak AI hypothesis for granted, and don't care about the strong AI hypothesis—
- If their program works, they don't care whether you call it a simulation of intelligence or real intelligence.