



Semester : \_\_\_\_\_

Subject : \_\_\_\_\_

Academic Year: 20 - 20

## 1.2 History of AI, Applications, The present states & Ethics in AI

### # History of AI

- 1943 : Evolution of Artificial Neurons
- 1950 : Turing machine
- 1956 : Birth of AI : Dartmouth conference
- 1966 : First chatbot : ELIZA
- 1972 : First Intelligence Robot : WABOT-1
- 1980 : Expert system
- 1987 - 1993 : Second AI winter
- 1997 : IBM Deep Blue
- 2002 : AI in home - Roomba
- 2011 : IBM's Watson : Wins a quiz show
- 2012 : Google now
- 2014 : Chatbot Eugene Goostman : Wins Turing test
- 2015 : Amazon Echo

### Maturation of AI [1943-1955]

- ★ 1943 : The 1<sup>st</sup> work which is now recognized as AI was done by Warren McCulloch and Walter Pitts in 1943. They proposed a model of Artificial Neurons.



- \* 1949: Donald Hebb demonstrated an updating rule for modifying the connection strength between neurons. His rule is now called **Hebbian Learning**.
- \* 1950: - The Alan Turing who was an English Mathematician and pioneered ML in 1950. He published Turing Test 1950.  
- Two Undergraduate students Marvin Minsky and Dean Edmonds build 1<sup>st</sup> Neural N/w computer in 1950.
- \* 1955: An Allen Newell and Herbert A. Simon created the "first AI Program" which was named as "Logic Theorist".

### Birth of AI [1956]

- \* 1956: The word "AI" first adopted by American Computer scientist John McCarthy at Dartmouth Conference. AI coined as an academic field.

### The Golden Years - Early enthusiasm [1956-1974]

- \* 1966: Joseph Weizenbaum created the 1<sup>st</sup> chatbot in 1966, which was named as ELIZA.
- \* 1972: The 1<sup>st</sup> intelligent humanoid robot was built in Japan which was named as WABOT-1.

### The First AI winter [1974-1980]

→ it is the time period when computer scientist dealt with a severe shortage of funding from government for AI researchers.

### A Boom of AI [1980-1987]

- \* 1980: - After AI winter duration, AI came back with "Expert System".  
- 1<sup>st</sup> National Conference of the American Association of AI was held at Stanford University.





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The Second AI Winter [1987 - 1993]

- again investors and government stopped in funding for AI research due to high cost but not efficient result.

The emergence of intelligent agents [1993 - 2011]

\* 1997: IBM Deep Blue beats world chess champion, Gary Kasparov & became the 1<sup>st</sup> computer to beat a world chess champion.

\* 2002: AI entered the home, in the form of Roomba, a vacuum cleaner.

\* 2006: AI came in the Business world till the year 2006.