



# **ARTIFICIAL INTELLIGENCE**



**WHAT IS  
INTELLIGENCE???**

# **“INTELLIGENCE”**

- **INTELLIGENCE IS WHAT WE USE WHEN WE DON'T KNOW WHAT TO DO.**
- **PEOPLE CAN RECOGNISE INTELLIGENCE IN OTHER PEOPLE.**

# FEATURES OF INTELLIGENCE

- PERFORM COMPLEX TASKS
- SOLVE UNSEEN PROBLEMS
- LEARN FROM OUR MISTAKES AND EXPERIENCE. AND much more.....



The image features two identical, glowing incandescent light bulbs, each encased within a transparent, three-dimensional cube. The cubes are positioned side-by-side on a dark, highly reflective surface that creates clear, inverted reflections of the cubes and their internal bulbs. The background is a deep, solid black, which makes the glowing bulbs and the transparent cubes stand out prominently. The overall composition is symmetrical and centered, with the text 'ARTIFICIAL INTELLIGENCE' superimposed over the middle of the image.

# ARTIFICIAL INTELLIGENCE

# “ARTIFICIAL”

MADE OR PRODUCED BY HUMAN BEINGS  
RATHER THAN OCCURING NATURALLY,  
ESPECIALLY AS A COPY OF SOMETHING  
NATURAL.



**WHAT IS ARTIFICIAL  
INTELLIGENCE???**

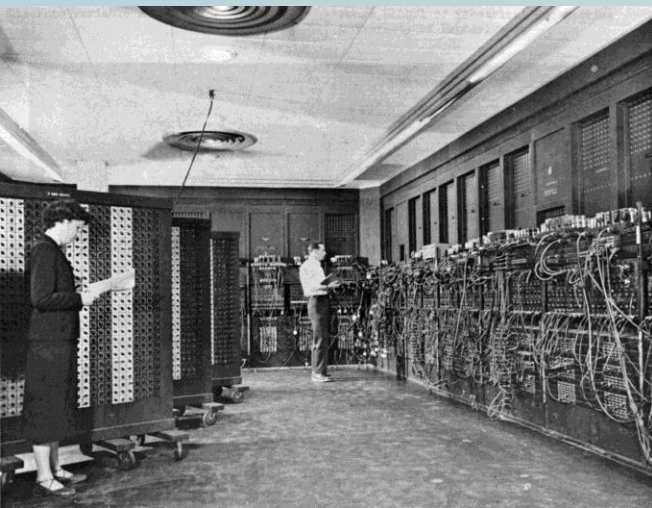


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- A person in a dark suit and tie is shown from the chest up, with their hands visible. The image is overlaid with a blue-tinted background featuring several glowing, semi-transparent gears of various sizes. The person's hands are positioned as if they are interacting with or adjusting these gears. The overall aesthetic is high-tech and futuristic.
- Artificial Intelligence is a branch of Science which deals with helping machines find solutions to complex problems in a more human-like fashion.
  - This generally involves borrowing characteristics from human intelligence, and applying them as algorithms in a computer friendly way.



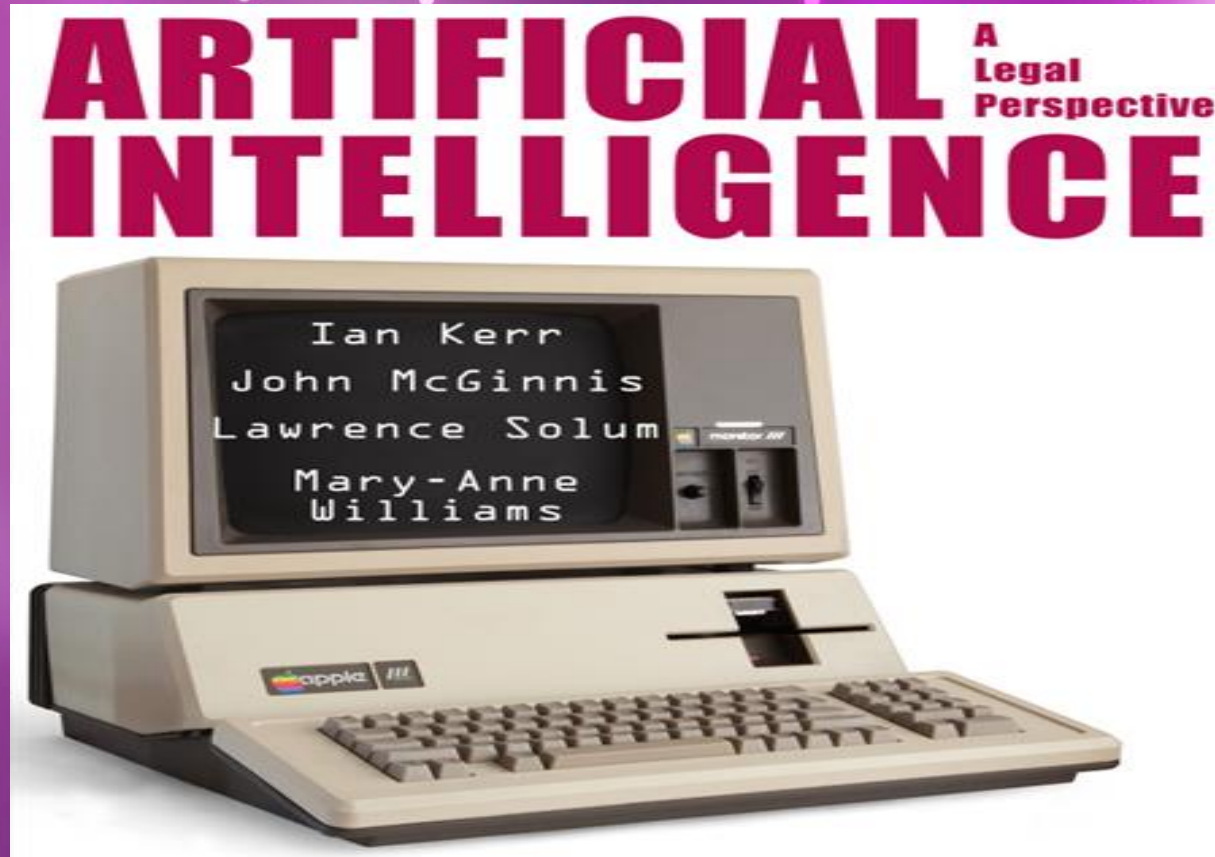
HISTORY

# 1941: First electronic computer (technology finally available )





**1956: Term Artificial Intelligence  
introduced**



**1960s: Checkers-playing program that was able to play games with opponents**







# 1997: Deep Blue plays the world's best chess player and wins.





# 2000: First sophisticated walking robot



# Categories of AI System

- Systems that think like humans
- Systems that act like humans
- Systems that think rationally
- Systems that act rationally



# APPLICATION OF AI

# Finance

- Banks use artificial intelligence systems to organize operations, invest in stocks, and manage properties
- Loan investigation, ATM design, safe and fast banking etc. also uses AI.
- In August 2001, robots beat humans in a simulated financial trading competition

# Hospitals and medicine

- A medical clinic can use artificial intelligence systems to organize bed schedules, make a staff rotation, and provide medical information and other important tasks.
- AI has also applications in field of cardiology (CRG), Neurology (MRI), Embryology (sonography), complex operations of internal organs etc.

# Heavy industry

- Huge machines involves risks in manual maintenance and working .
- Robots are safe and efficient agent for it.
- They are often given jobs that are considered dangerous to humans.
- Robots have proven effective in jobs that are very repetitive which may lead to mistakes or accidents due to a lapse in concentration and other jobs which humans may find degrading



# Telecommunications maintenance

- Many telecommunications companies make use of heuristic search in the management of their workforces,
- for example BT Group has deployed heuristic search in a scheduling application that provides the work schedules of 20,000 engineers.

# Gaming

- AI has also been applied to video games, for example video game bots, which are designed to stand in as opponents where humans aren't available or desired

# Music

- scientists are trying to make the computer emulate the activities of the skillful musician. Composition, performance, music theory, sound processing are some of the major areas on which research in Music and Artificial Intelligence are focusing.

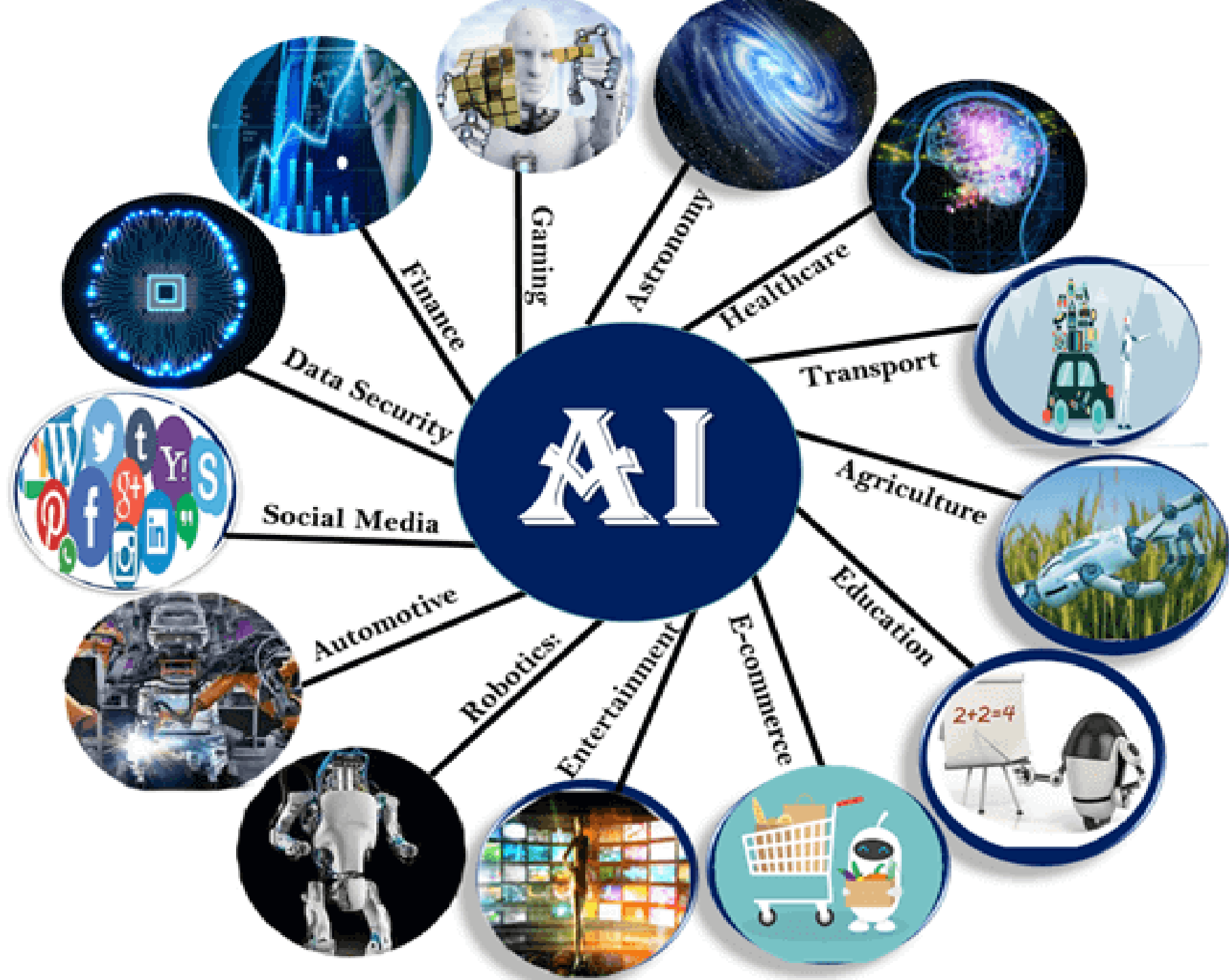
# Antiviruses

- AI has played increasingly played important role in Antivirus detection.
- At present, some principle AI techniques applied in antivirus detection.
- It improves the performance of antivirus detection systems and promotes the production of new AI algorithms and application in antivirus detection to integrate antivirus detection with AI.

# Uses of robotics

- Agriculture
- Automobile
- Construction
- Entertainment
- Health care: hospitals, patient-care, surgery , research, etc.
- Household purposes
- Laboratories: science, engineering , etc.
- Manufacturing
- Military: demining, surveillance, attack, etc.
- Mining, excavation and exploration
- Transportation: air, ground, rail, space, etc.
- Utilities: gas, water and electricity
- Warehouses





# AI in Astronomy

Artificial Intelligence can be very useful to solve complex universe problems.

AI technology can be helpful for understanding the universe such as how it works, origin, etc.

# AI in Healthcare

In the last, five to ten years, AI becoming more advantageous for the healthcare industry and going to have a significant impact on this industry.

Healthcare Industries are applying AI to make a better and faster diagnosis than humans.

AI can help doctors with diagnoses and can inform when patients are worsening so that medical help can reach to the patient before hospitalization.



# AI in Gaming

AI can be used for gaming purpose.

The AI machines can play strategic games like chess, where the machine needs to think of a large number of possible places.

# AI in Entertainment

We are currently using some AI based applications in our daily life with some entertainment services such as Netflix or Amazon. With the help of ML/AI algorithms, these services show the recommendations for programs or shows.

# AI in education:

AI can automate grading so that the tutor can have more time to teach.

AI chatbot can communicate with students as a teaching assistant.

AI in the future can be work as a personal virtual tutor for students, which will be accessible easily at any time and any place.