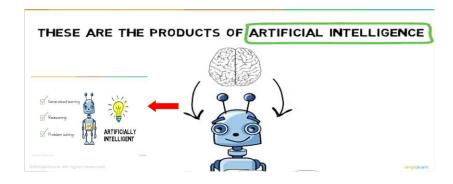


# What is Artificial Intelligence?

- > The study of computer systems that attempts to model and apply the intelligence of the human mind.
- ➤ The capability of a machine to imitate intelligent human behavior.
- ➤ A branch of a computer science dealing with the simulation of intelligent behavior in computer.
- ➤ Some of the activities computers with AI are designed for include:
- Speech recognition
- Learning
- Planning
- Problem solving

## Philosophy of AI

- ➤ While exploiting the power of the computer systems, the curiosity of human, lead him to wonder, "Can a machine think and behave like humans do?"
- Thus, the development of AI started with the intention of creating similar intelligence in machines that we find and regard high in humans.



## **Early History of AI**

- ➤ Early 1940's Invention of Modern Computer
- ➤ Early 1950's Computational Statistics
- ➤ Mid 1950's Machine Learning
- ➤ In 1958 Birth of Artificial Intelligence
- ➤ Mid 1960's Natural Language processing
- ➤ Late 1960's Computer Vision
- ➤ Late 1970's Robotics
- > 1990-2000 Data Mining / Data Science
- ➤ Early 2010's Deep Learning



## **Components of AI**

#### **Programming Without AI**

- A computer program without AI can answer the specific questions it is meant to solve
- ➤ Modification in the program leads to change in its structure.
- Modification is not quick and easy. It may lead to affecting the program adversely.

#### **Programming With AI**

- A computer program with AI can answer the generic questions it is meant to solve.
- ➤ AI programs can absorb new modifications by putting highly independent pieces of information together. Hence you can modify even a minute piece of information of program without affecting its structure.
- > Quick and Easy program modification.

## **Pros and Cons of AI**

#### Pros

- Precision and Accuracy
- > Space Exploration.
- > Used for Mining Process.
- > Fraud Detection.
- Robotic Pet and Robotic Radio Surgery.
- > Diagnosis and Treatment.

#### Cons

- Lack of the human touch.
- > Lack of the creative mind.
- Lack of the common sense.
- > Unemployment.
- ➤ Abilities of humans may diminish.
- Over dependency of humans on machine.



## **Current status of AI**

We can see AI in all around us like:

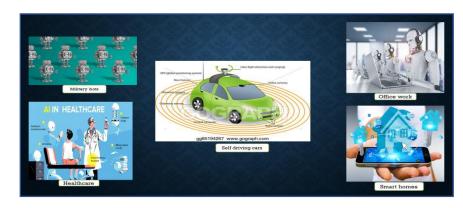
- ➤ In Robotics
- ➤ In Video Games Characters
- > In Face Recognitions
- ➤ In using Siri/Cortana

# Mobile phones (Siri/Cortana) Video Games Characters GPS/Voice Recognition Robotics

## **Future of AI**

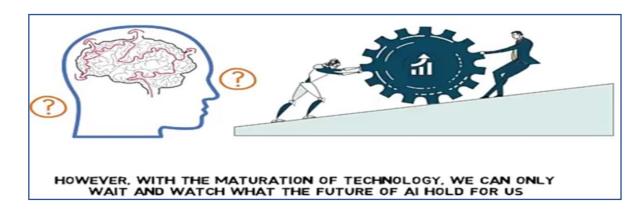
We'll see AI in future in different fields like:

- Military Bots
- Driverless Cars
- ➤ In Health Care
- Smart Homes
- Office Works



# **Conclusion**

- Finally we can say that AI is the intelligence of the machine in the branch of computer science that aims to create it.
- ➤ John McCarthy who coined the term "Science and Engineering are making the Intelligent Machines".
- ➤ Games with no AI?
- Not possible!
- Every game with computer controlled characters/opponents uses some source of AI.



~ Kishan Kumar Rai