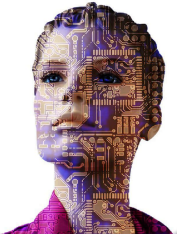


# ARTIFICIAL INTELLIGENCE



## What is Artificial Intelligence (AI)?

"The science and engineering of making intelligent machines, especially intelligent computer programs". – According to the father of Artificial Intelligence, John McCarthy

**01 Philosophy of AI:**

AI development has begun with an intention of developing intelligence in machines similar to that of humans.

**02 Goals of AI:**

1. Creating expert systems
2. Implementing intelligence in machines

**03 What Contributes to AI?**

Computer Science  
Biology  
Psychology  
Linguistics  
Mathematics  
and Engineering.

## What is AI Technique?

The AI technique is a process to format and uses the knowledge effectively

The knowledge should be graspable

Must be easily adaptable to correct errors

Can be used efficiently even if it is incomplete

## Applications of AI

- Gaming
- Natural Language Processing
- Expert Systems
- Intelligent Robots
- Handwriting Recognition
- Speech Recognition
- Vision Systems

## Advantages and Disadvantages of AI

Advantages of AI	Disadvantages of AI
Error Reduction	High Cost
Difficult Exploration	No Replicating Humans
Daily Application	No Improvement with Experience
Digital Assistants	No Original Creativity
Repetitive Jobs	Unemployment
Medical Applications	Can't think out of box
No Breaks	No Compassion and Sympathy

## AI Safety Research: What Experts Say

- 01 Pieter Abbeel of the University of California**

Computer scientist Pieter Abbeel of the University of California says "that robots will be able to keep us much safer from destruction in near future". It will help us in taking care of the old without tiring out and hence human beings will enjoy independence for a longer period. He predicts that AI can help us in drastically reducing traffic accidents. It can bring such incidents to zero if developed properly.
- 02 Shimon Whiteson**

Shimon Whiteson believes that man and computer are not separate; they are in fact a single cognitive unit.
- 03 Yoky Matsuoka**

Yoky Matsuoka has a unique example of AI benefit. Suppose a human being loses a limb. Now he has been given an artificial limb. Just imagine the wonders AI can do to the person if the limb can be operated through machine intelligence. Things that the human being is not able to perform on his own anymore are performed by the machine intelligence and he is able to enjoy the fruits as if he is performing the act. Wonderful, isn't it?
- 04 Thomas Dietterich**

Thomas Dietterich is absolutely fascinated by the idea of the combination of human and artificial intelligence. He believes that machine intelligence in future can give us augmented sensory abilities like extended vision or ability to hear and he also coined a term 'exoskeleton'. As per him, this will help us to walk around even when our bones are weak when we are old. Your eyes and ears fail you but AI helps you to continue to hear and see.
- 05 Stuart Russell**

Stuart Russell believes that all the problems that we encounter including that of climate change can be addressed with the help of artificial intelligence. Artificial intelligence magnifies the human intelligence and it can only take this human civilization forward and not backward. It can predict an environmental catastrophe and help us act fast, cure a disease or even help us eliminate poverty.
- 06 Oren Etzioni**

"The sky is the limit" – says Oren Etzioni, CEO of Allen Institute of Artificial Intelligence. Everything that human beings have contemplated starting from space exploration to finding a solution to the deadly Ebola, could have been more documented and tractable with the impact of artificial intelligence. AI will document the footprints of human developments.

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