ARTIFICIAL INTELLIGENCE (AI) -The Glory of Technology

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"A year spent in artificial intelligence is enough to make one believe in God." -There is no reason and no way that a human mind can keep up with an artificial intelligence machine by 2035.

Is artificial intelligence less than our intelligence?

Artificial Intelligence (AI) is intelligence demonstrated by machines as opposed to intelligence shown by animals and humans. It is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that generally requires human intelligence.

We live in a remarkably advanced world, which was not predicted two centuries ago. This era has been marked by rapid changes and advancements in technology to give us the best on plate! With new inventions and discoveries our life has become simpler, what was considered unachievable has been achieved now.

It has been predicted that robots or AI machines will replace humans in the long run, when machines will surpass human intelligence and will perform every task efficiently and having their own control over it. In several science-fiction movies the beauty and mystery of extravagant life of humans and robots and also the future of AI has been described beautifully.

How AI works?

AI works by combining large amounts of data with fast, iterative processing and intelligent algorithms, allowing the software to learn automatically from patterns and features in the data. The computer has to learn how to respond to certain actions, so it uses algorithms and historical data to create something called propensity model. This models then start making predictions.

AI can do much more than this but those are the common uses and functionality for marketing. Generally, AI works in the following process-

Machine Learning-Machine Learning teaches a machine how to make decision based on the past experiences. It identifies patterns, analyses past data to infer the meaning of these points to reach a possible outcome or conclusion without having to involve human experiences

Deep Learning-Deep Learning is a Machine Learning technique. It teaches a machine to process inputs through layers in order to classify and predict the outcome.

Neural Networks-Neural Networks work on the similar principles as of human Neural cells. They are a series of algorithms that captures the relationship between various underlying variables and processes the data that a human brain does.

Natural Language Processing-It is a science of reading, understanding, interpreting a language by a machine. Once a machine understands what the user intends to communicate, it responds accordingly.

Computer Vision-Computer Vision tries to understand an image by breaking down an image and studying different parts of the objects. This helps the machine to classify and learn from a set of images to make a better output decision based on previous observations.

Cognitive Computing-Cognitive Computing algorithms try to mimic a human brain by analysing text, speech, images, objects in a manner that a human does and tries to give the desired output.

What are the types of AI?

Artificial Narrow Intelligence (ANI)-These Artificial Intelligence Systems are designed to solve one single problem and would be able to execute a single task well. This is the only kind of artificial Intelligence that exists today. They are able to come close to human functioning in very specific contexts and even surpass them in very specific contexts.

Artificial General Intelligence (AGI)-It is a hypothetical concept or theoretical concept, also known as strong AI or deep AI. This concept establishes the capability in a machine to imitate human intelligence with the ability to think, understand, learn and apply it to a particular situation as the humans can do. Although, this concept is not applicable in the present situation.

Artificial Super Intelligence (ASI)-It is also a theoretical concept, it is basically an imaginary AI which will not only interpret and understand human behaviour and intelligence but ASI is where machines will become self-dependent, self-aware enough to surpass the capacity of human intelligence and behavioural ability and would also be able to build up emotional relationships.

WHAT IS THE PURPOSE OF ARTIFICIAL INTERLLIGENCE(AI)?

The basic goal of AI is to develop intelligent machines that could learn on their own there would be no more intervention for feeding data to machines it will allow the computers and machines to function in an intelligent manner. From a philosophical perspective, Artificial Intelligence has the potential to help humans to live a more meaningful life devoid of hard labour.

Currently, the purpose of AI is shared by all the different agencies- to simplify the human effort, and to help us to make better decisions. In few cases, Artificial Intelligence has been touted as our final invention, a creation that would develop ground breaking tools and services that would completely change how we lead our lives now. That's all in the far future though we are still a long way to go for those outcomes.

In the present, Artificial Intelligence is being used mostly by companies to improve their process efficiencies, automate resources and also to perform heavy tasks and to make predictions based on the present data.

WHERE IS ARTIFICIAL INTELLIGENCE (AI) USED?

Artificial Intelligence is widely used to provide personalised recommendations to people by giving insights into the user activity or searches in various domains.AI is used everywhere by large organisations to make an end user's life simpler.

For example, Google's predictive search algorithm uses past data to predict what a user wants to see next based on the similar category and also predicts what a user may type on the search bar. Netflix uses the past user data to recommend what a movie a user might like to see next, making the user hooked into the platform and also increases the watch time which at last increases the revenue of the company. In a similar manner Facebook uses past data and give recommendations to tag friends, based on their facial outlook in the images and today AI is used in almost every online application of retail shopping, security and surveillances, sports analytics and activities and manufacturing production only to make the life of user more comfortable and simpler.

WHAT ARE THE ADVANTAGES OF AI?

Artificial Intelligence is pushing the boundaries of machine enabled functionalities. AI facilities the creation of a next-generation workplace that thrives on seamless collaboration between enterprise systems and individuals.

The following are the primary advantages of AI-

-AI drives down the time taken to perform a task. It enables multi-tasking and eases the workboard for existing resources.

-It reduces human error and helps to take decisions much faster.

- It remains available for 24x7 without any interruption.

- It improves security of the domain and also gives digital assistance.

WHAT ARE THE DRAWBACKS OF AI?

- High cost of implementation-setting AI based machines and computers etc.

- Machine does not improve with experiences.

- The present-day AI systems lacks creativity, it only focuses on the repetitive works or iterations and make decisions.

- The advancement of AI may lead to huge unemployment.

ARTIFICIAL INTELLIGENCE IN OUR EVERYDAY LIFE.

- Here are the few examples of AI used in our daily lives-

- Self-driving and parking vehicles

- Digital Assistants such as Google assistant, Alexa, Siri, Cortana etc.

- Digital assistants or chatbots used in various domains.

- Social Media such as Facebook, Instagram.

- Maps and Navigation systems.

CONCLUSION.

Artificial Intelligence is at the centre of a new enterprise to build computational models of intelligence.AI and the technology are the one side of that life that always surprise us with new ideas, topics, innovations, products etc.AI is still not completely implemented. As humans, we are able to complete a task to the prime of our capacity through the combination of experiences, emotions, logic and experience on the other hand AI formulates a conclusion through a series of mathematical equations, numerous numbers of code and a series of zeros and ones in order to mimic our human capabilities and decision making. Artificial Intelligence is impacting the future virtually of every industry and human being.AI has acted as the main driver of emerging technologies like big data, robotics and a lot it will continue to act as a technological innovator for the foreseeable future.