Artificial Intelligence and Society

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Human is considered as the most intelligent among all the beings. Due to his developed brain, he progressed since many centuries. AI is the result of his intellect. Many advancements are ongoing in technical field to make Human life comfortable. AI is one of its example.

Artificial Intelligence (AI)

Broadly speaking, artificially intelligent systems can perform tasks commonly associated with human cognitive functions — such as interpreting speech, playing games and identifying patterns.

Types of Artificial Intelligence

Strong AI Vs. Weak AI: Intelligence is tricky to define, which is why AI experts typically distinguish between strong AI and weak AI.

Strong AI: Strong AI, also known as artificial general intelligence, is a machine that can solve problems it's never been trained to work on — much like a human can. This is the kind of AI we see in movies, like the robots from Westworld or the character Data from Star Trek: The Next Generation. This type of AI doesn't actually exist yet.

In contrast to weak AI, strong AI represents a machine with a full set of cognitive abilities — and an equally wide array of use cases — but time hasn't eased the difficulty of achieving such a feat.

Weak AI: Weak AI, sometimes referred to as narrow AI or specialized AI, operates within a limited context and is a simulation of human intelligence applied to a narrowly defined problem (like driving a car, transcribing human speech or curating content on a website).

Weak AI is often focused on performing a single task extremely well. While these machines may seem intelligent, they operate under far more constraints and limitations than even the most basic human intelligence.

Examples for Weak AI include:
• Siri, Alexa and other smart assistants
• Self-driving cars
• Google search
• Conversational bots
• Email spam filters
• Netflix's recommendations

Artificial Intelligence applicable in every sphere Artificial intelligence technology takes many forms, from chatbots to navigation apps and wearable fitness trackers. The below examples illustrate the breadth of potential AI applications.

ChatGPT
ChatGPT is an artificial intelligence chatbot capable of producing written content in a range of formats, from essays to code and answers to simple questions. Launched in November 2022 by OpenAI, ChatGPT is powered by a large language model that allows it to closely emulate human writing.

Google Maps Google Maps uses location data from smartphones, as well as user-reported data on things like construction and car accidents.etc

Smart Assistants
Personal assistants like Siri, Alexa and Cortana use natural language processing, or NLP, to receive instructions from users to set reminders, search for online information and control the lights in people's homes.

Snapchat Filters
Snapchat filters use ML algorithms to distinguish between an image's subject and the background, track facial movements and adjust the image on the screen based on what the user is doing.

Self-Driving Cars

Self-driving cars are a recognizable example of deep learning, since they use deep neural networks to detect objects around them, determine their distance from other cars, identify traffic signals and much more.

Wearables

The wearable sensors and devices used in the healthcare industry also apply deep learning to assess the health condition of the patient, including their blood sugar levels, blood pressure and heart rate. They can also derive patterns from a patient's prior medical data and use that to anticipate any future health conditions.

MuZero

MuZero, a computer program created by DeepMind, is a promising frontrunner in the quest to achieve true artificial general intelligence. It has managed to master games it has not even been taught to play, including chess and an entire suite of Atari games, through brute force, playing games millions of times.

How AI is helping a common person's life

1.AI for personal security and identification Image processing and recognition is a subfield of AI. Imagine, you are passing through your office where entry is restricted and an unauthorized person is not allowed. With AI, almost every organization is using this technology for security as well as attendance. Moreover, the bank transactions and issuance of personal mobile SIM are also being secured by biometrics these days. Fingerprints, facial recognition, retina scan and palm scan, all are used nowadays.

2.Search engines use AI to optimize search results When you enter any search query in the google search bar, you get certain results showing links, images or videos. While typing, you also notice that google offer some suggestion prior to your query is typed completely. All happening in the background is artificial intelligence. Google collects data about your search history, videos watched by you, ads clicked or viewed by you, location, websites visited, apps, and devices you use. Some information is not collected by google but the user provides the consent to collect. This includes name, birthday, gender, passwords and anything you type in. According to Google's privacy policy, your data is not disclosed to anyone. This data is only used to enhance your experience with google and suggestions according to your needs. Google search suggestions use AI

3.Smart email response Smart email response uses AI "Hi, I hope you are……… ". You might have seen while typing an email, the phrase in quotations, "doing great." is automatically filled as your email knows it already what you are going to type.

4.Google location services and maps Either you want to call for Uber or asking google about tasty pizza around you, Google Maps and Location services are undoubtedly your first choice. These services are gathering data about your location, your travel history, previously-stored places, and time of travel that calculates average speed through certain roads. AI algorithm analyses every bit of information to suggest you shorter and safer ways, highly rated restaurant and other places around you, estimated time to reach and people nearby. Google Maps uses AI

5.AI is assisting medical science for swift, accurate diagnosis and err-free treatment Robotic surgery in progress

6. AI-controlled vehicles (Autonomous cars) Autonomous vehicle uses AI

7.AI-assisted home appliances Robotic kitchen at work

8.City surveillance and safety The use of AI surveillance is increasing worldwide. AI cameras are being installed throughout the cities that not only detect the face but also warn about certain malicious activities like robbing, murder or stealing. Cameras are connected to smart programs that are trained with images and videos and every data is categorized. The camera can easily detect the difference between mischief and robbery.

These cameras are also recording and maintaining the data of a person's movement and locality. This data can be used for further security.
Surveillance and safety using AI

9.Smart flight operations   The airline industry uses Artificial Intelligence to improve flight operations including revenue management, air-safety and plain maintenance, feedback analysis, communication automation, crew management, fuel efficiency optimization.

10. Artificial intelligence in business E-commerce is going to be handed over to AI very soon in the future. Every E-commerce store is collecting user data, that is used to train AI programs for the better shopping experience and correctly anticipated user's choice. Transaction records, economy flow and credit management are also being control using AI.

AI and Ancient India
Since, Ramayana and Mahabharata period, many weapons and other usable means were made which were based on technology without name. Take the example of Pushpak Viman in Ramayana period, very advanced technology was used. But, it did not come to common man.

Now is the time when advancement of technology has been given the name AI which is well known in the society and is ready for those who learn about the technology.Agastya who was a Rishi in the vedic period had predicted many scientific principles and architecture.

Sage Agastya repeatedly describes Ayodhya   as a rich city with wide roads beautiful gardens and shady trees.

Today, AI has done wonders by planning the city of Ayodhya. It looks the same way as predicted by Sage Agastya of Vedic period.

Limitations of Artificial Intelligence:

1) Requires Monitoring
2) Limited to Pre-fed task

3) Maintenance and Cost
4) Lacks Creativity
5) Absence of Privacy, Safety, and Ethics
6) Adversarial Attacks :In a recent case, which is published as news, is the case of suit filed by well known Indian Actor Anil Kapoor, of the Indian film industry. In this case The High Court of Delhi has passed a landmark order. With rapid changes in technology, there has been rampant misuse of personality attributes such as name, image. Likeness, voice, etc. through tools like artificial intelligence. In this landmark order, the Delhi High Court restrains unauthorized use of anil Kapoor's personality rights through these tools, including ai, without his consent for illegal commercial gains. The order sets a precedent against such misuse in the future.

If Human Intelligence is compared with AI:
Human Intelligence is -
The human mind is capable of adjusting its perspectives in response to the changing conditions of its surroundings. Because of this, people are able to remember information and excel in a variety of activities.
Humans are superior to other social animals in terms of their ability to assimilate theoretical facts, their level of self-awareness, and their sensitivity to the emotions of others. This is because people are social and creative creatures.

Can AI feel emotions?
The short answer is no. AI is a machine, and machines do not have emotions. They can simulate emotions to some extent, but they do not actually feel them. Emotions are a complex mix of physiological and psychological responses to external stimuli, and machines simply do not have the necessary biology or consciousness to experience them.

It takes artificial intelligence a lot more time to adapt to unneeded changes.

In the same way that a framework may learn tasks one at a time, artificial intelligence is only able to accomplish a fraction of the tasks at the same time. Artificial intelligence has not yet mastered

the ability to pick up on associated social and enthusiastic indicators.

It improves the overall performance of the system. It is impossible for it to be creative or inventive since robots cannot think in the same way that people can.

THE INDIAN CONTEXT –

AI will not be restricted to the engineers or youngsters. It will enter into every household. In India, the g have become very popular and they are being handled by even the seniors and children. As already been mentioned, the restrictions remained. With the fast growing technology, India is not behind.

It is a myth that AI would replace Human Beings and jobs.

In schools and colleges , Teachers will not be replaced by technology, but teachers will use it as a tool, to give more information or teach technique to students. Similarly, AI may replace workforce in finance department but major posts and jobs will remain intact in order to give data to AI softwares. It can be said very safely that blue collared job will remain with a small proportion of cut off and maximum hit will be in the field of artists, photography, modeling, etc.

It's a landmark order – With rapid changes in Technology, there has been rampant misuse of personality attributes such as name, image, likeness, voice, etc through tools like artificial intelligence in a landmark order, The Delhi High Court restrains unauthorized use of Anil Kapoor's personality rights through these tools, including AI, without his consent for illegal commercial gains. The Order sets a precedent against such misuse in the future. We have to remember that we have to be in the tune of the generation we live into the Generation we live into. The Generation of AI is switching from fourth to fifth, we have to catch up with the existing tools. We have to know its restrictions. We must believe into the capabilities of Human existence. Humans have many more capabilities which can be never replaced by machine. Man will always drive the machine. Machine has to follow the Human intellect.

"Music and dance can be used as an instrument for ensuring global peace and act as a binding force."

-APJ Abdul Kalam