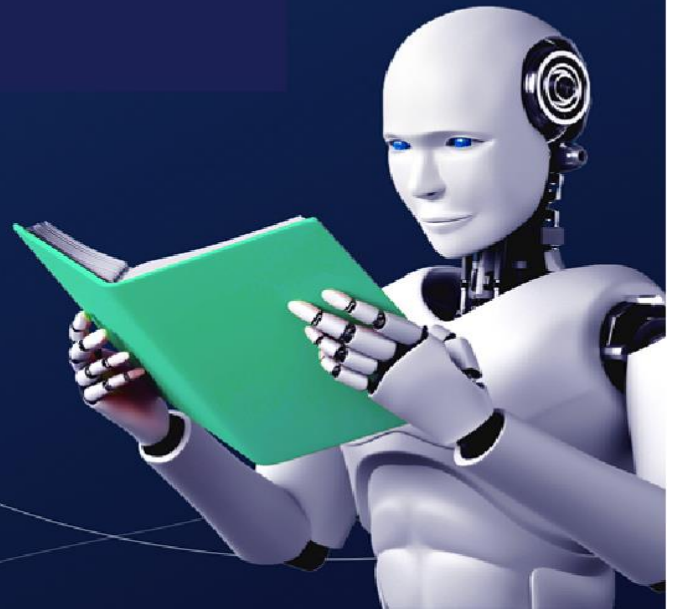


Artificial Intelligence



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1 WHAT IS AI?

Artificial Intelligence is the ability for a computer to think, learn and simulate human mental processes, such as perceiving, reasoning, and learning.

It can also independently perform complex tasks that once required human input.

2

how does machine Learning Relate to Ai?



Although the terms artificial intelligence (AI) and machine learning are frequently used interchangeably, (machine learning is a subset of the larger category of AI.)

Artificial intelligence signifies computers' general ability to mimic human thought while carrying out tasks in real-world environments

Machine learning implies to the technologies and algorithms that allow systems to recognize patterns, make decisions, and improve themselves through experience and data.



3 EXAMPLES



Virtual Assistance

Autonomous vehicles

Chatbots

E-commerce

AI can be used for various situations, but these are some examples of AI in our daily life.

Recommendation systems

Navigation apps

Facial recognition

Text editors



Harshini and Bhavika

Sofia THE AI ROBOT



Sophia is a realistic humanoid robot capable of displaying humanlike expressions and interacting with people. It's designed for research, education, and entertainment, and helps promote public discussion about AI ethics and the future of robotics.

4 WHAT PROBLEMS CAN AI SOLVE?

- **Cybersecurity** → detecting spam
- **Healthcare** → medical records
- **Research** → idea generation, finding data
- **Transportation** → self driving cars



As shown above, AI can solve a LOT of problems. Let's explore a few on the next slide!

USES OF AI (ADVANTAGES OF AI)

Image and facial recognition

- It can help make data safer and more secure.
- For example, face authentication can ensure that only the appropriate person has access to sensitive information that is intended specifically for them.

Medical diagnosis

- Provides more exact diagnoses, detects hidden patterns in imaging investigations, and predicts how patients will respond to specific medications.
- This leads to better treatment strategies, fewer clinical errors, and more accurate diagnosis.

Customer service

- Customer service teams can get feedback from customers by using AI.
- For example, AI-powered information can provide agents with information on client intent, language, and sentiment so they are aware of how to approach an encounter.

Recommendation systems

- AI content recommendations help people stay engaged and informed.
- For example, Virtual(Siri and Alexa), Personalized content on streaming platforms, Apps that suggest best routes based on traffic.





5

WHAT ARE THE DISADVANTAGES OF AI?

- Lack of Transparency → lying about using AI
- Bias and Discrimination → assumption based of incorrect information
- Privacy Concerns
- Ethical Dilemmas →
- Security Risks
- Concentration of Power
- Dependence on AI
- Job Displacement



6

HOW CAN WE USE AI RESPONSIBLY?

People should use their own creativity, not copy off of AI! AI is just a tool for efficiency!

Put People First

Consider data and privacy goals

Minimize unintended bias

Ensure AI transparency



RESPONSIBLE AI USE

AI can help do repetitive work for humans, but humans should still be prioritized. Create a culture that utilizes creativity, empathy, and dexterity from humans and AI for increased efficiency.

Businesses should adopt strong security measures, limit access to sensitive data, and anonymize data whenever possible to secure data privacy with AI and ML technologies.

There needs to be fairness in AI which entails identifying and eliminating discrimination while also encouraging diversity and inclusion. This can be done by using training models with equal representation.

Develop explainable AI that is visible across processes and functions to generate trust among employees and customers. Provide examinability, comprehension, and traceability.



Applications of Artificial Intelligence

