Artificial Intelligence - Lead with Video of John Lennon's Song

Large Language Models - Text based on billions of words and code

- 1. Statistical reasoning machine based on text as tokens that does pattern recognition
- 2. Probable relationships between tokens generate outcomes, translation, editing, and writing that is smoothed, normalized, and predictable
- 3. There can be errors called "hallucinations"
- 4. Hallucinations caused by engineering decisions and corrected by "guardrails"
- 5. Guardrails are engineered validations to prevent and safeguard accuracy, there are no fixes
- 6. Translation, summarization, information retrieval, and conversational interactions are some of the complex language tasks that machines are expected to

handle

Examples of LLM AI

- 1. Google Gemini
 - https://gemini.google.com/app
- 2. Microsoft CoPilot
 - https://copilot.microsoft.com/onboarding
- 3. Chat GPT

https://chatgpt.com/

- 4. List of 6 best AI writing generators in 2024
 - https://zapier.com/blog/best-ai-writing-generator/

Jasper for businesses

- Anyword for advertising and social media
 - Writer for AI compliance
- Writesonic for content marketing
- Rytr for an affordable AI writer
- Sudowrite for fiction

5. Top 10 Real-Life Applications of LLM (Alexia and Grammarly) https://pixelplex.io/blog/llm-applications/

6. Open Al

https://openai.com/

Data Crunching - Health Care

AI Workshop NEA Retired

Now and Then - Beatles Song as Intro https://youtu.be/APJAQoSCwuA?si=N2f_WZ5hS8nXBFST_The Beatles

<u>https://youtu.be/azCEpoYLxeg?si=g3PSYGaS9UN3pX2-</u> Randy Travis <u>https://youtu.be/zM2UzZ4TVGw?si=HR-L8IAn2dgnRfVn</u> Sunday Morning Randy Travis

https://www.nea.org/resource-library/artificial-intelligence-education

What is AI and the types of AI

Artificial narrow intelligence (ANI)

Also known as "weak AI", this is the most common type of AI and is used in many applications, including mobile phones, the internet, and big data analysis. ANI is designed to perform a single task and is very good at it, but it can't apply its knowledge to new situations.

Artificial general intelligence (AGI)

AGI is the ability of an AI to learn, perceive, understand, and function like a human. AGI systems can build competencies independently and form connections across domains.

Artificial superintelligence (ASI)

ASI is a hypothetical future stage of AI that would be more capable than a human. It's theorized that once AI reaches general intelligence, it will learn so quickly that its knowledge and capabilities will surpass those of humans.

Limited memory

This type of AI has some memory retention capabilities, allowing it to learn from past data and make decisions. Most existing AI applications fall into this category.

Reactive machines

These AI systems have no memory and are task specific, meaning that the same input always produces the same output.

Self-aware

This theoretical type of AI would have its own consciousness, sentience, and self-

awareness. It would be able to understand and have emotions, which could lead it to form beliefs and desires.

Here are some types of artificial intelligence (AI):

- Weak AI: Can only perform specific tasks, such as playing chess or translating languages
- Strong AI: Can perform any task that a human can
- Self-aware AI: A hypothetical future form of AI that would have its own consciousness and self-awareness
- Theory of mind: AI that can perceive and understand the emotions of others
- Reactive machines: Basic AI that reacts to current scenarios based on the best possible action. Examples include IBM's Deep Blue system and Google's AlphaGo
- Limited memory: AI that can store past data for a short period and perform based on that information. Self-driving cars are an example of limited memory AI
- **Machine learning**: A subset of AI that focuses on developing algorithms and models that allow computers to learn from data
- Natural language processing (NLP): A branch of AI that allows computers to understand written text and voice and perform actions accordingly. Chatbots and virtual assistants are examples of NLP-based apps
- **Deep learning**: An advanced AI system that uses neural networks to solve complex problems, such as natural language processing and image recognition
- Artificial superintelligence (ASI): A theoretical AI that has reached the general intelligence level and learns at such a fast rate that its knowledge and capabilities become stronger than that of humankind

https://en.wikipedia.org/wiki/Artificial_intelligence

Free artificial intelligence software

From sources across the web

Google Al

Google AI



ChatGPT

copy.ai

CopyAl, Inc.



Explainable AI



Gemini



Generative AI

Jasper

Jasper Al, Inc.



Microsoft Copilot



Adobe Firefly



Descript



Grammarly



Huggingchat | Best Open-source Chatbot



IBM Watson



Midjourney



PyTorch



Scale



Scikit-learn

Speech recognition



TensorFlow Adobe Podcast Al

Apache MXNet