

WHAT IS GENERATIVE AI

- EXPLANATIONS OF KEY ELEMENTS
- HAVE YOU USED CHATGPT OR BARD OR OTHER AI PRODUCT?
- AI USES AND EXAMPLES-FEATURES,VIDEOS,ACTUAL USAGE
- AI IN THE FUTURE-MUCH MORE COMING

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KEY ELEMENT 1 - 2012 NEURAL NETWORKS

Mathematical based system that learns skills by finding statistical patterns in enormous amounts of data. Example- By analyzing thousands of cat photos, it can learn to recognize a cat.

KEY ELEMENT 2- 2018 LARGE LANGUAGE MODELS

Companies like Google, Microsoft and OpenAI began building neural networks that were trained on vast amounts of text from all sources including the internet, Wikipedia articles, digital books and academic papers.

LLMs build huge Libraries of Information for general purpose inquiry and “learning” or for specific “areas” such as medical research

4 THESE DEVELOPMENTS LED TO GENERATIVE AI

- A Technology that creates content — including text, images, video and computer code — by finding patterns in massive quantities of training data, and then creating original material that has similar characteristics
- The data base is similar to analysing the content of a library. The systems review this data and respond to information requests based on what it finds
- Always be skeptical as the data used is similar to the books in a library where there are both Factual "books" and FICTION!
- .short video explanation of AI- <https://www.youtube.com/watch?v=ad79nYk2keg>

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AI THAT WE CAN ALL USE

- Generative A.I. can already answer questions, write poetry, generate computer code and carry on conversations. We will look at many uses and “answers”.
- AI Systems are now available to answer our personal needs. Many new ones are coming but the best current general ones are ChatGPT and BARD along with Bing which Microsoft built around the Chat GPT Open AI architecture (Microsoft put \$13 Billion into Open AI to gain access).
- We will concentrate on the FREE version of ChatGPT and on Google BARD in this presentation.
- Lets look at Some Useful Features

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EDITING ANYTHING YOU WRITE

- You can use AI to review anything you write and suggest improvements
- It can improve your emails, cover letters or any other writing you're working on
- But you should always check the results carefully

7 REHEARSING FOR REAL-WORLD “ISSUES”

- We often need to have tough conversations with friends or relatives
- To ensure that we are well prepared we could ask AI to take part in a role-playing exercise
- Generative AI Systems can be a kind of on-demand sounding board, offering us basic feedback and advice without judgment

8 GETTING CREATIVELY UNSTUCK

- Ethan Mollick, a professor at the University of Pennsylvania's Wharton School, recommends using A.I
- A person who wanted to start a bakery, for example, could ask ChatGPT for a list of all the necessary equipment and permits

9 SUMMARY NOTES FOR EVERYTHING

- One of the most powerful abilities of AI is that
- You can get AI to “read” long articles and summarize them for you
- AI usually gets all the broad strokes right even if some of the details are missing
- It also works for videos-It will provide you with a text summary of a video on demand

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TRANSLATE A LETTER A DOCUMENT OR A PHRASE INTO ANOTHER LANGUAGE

EX. "HOW DO I GET TO THE BORDER"
IN SPANISH"? AI PROVIDES OPTIONS AND CHOICES-

- **¿Cómo puedo llegar a la frontera con México?**
- **¿Me podría indicar cómo llegar a la frontera con México?**
- **¿Cómo llego a la frontera con México?**
- **¿Qué camino tomo para llegar a la frontera con México?**
- **¿Me puedes decir cómo llegar a México?**
- **Necesito llegar a la frontera con México**
- **Use "la frontera con México" instead of just "México" to be specific about which border you are asking about**
- **Use the appropriate form of "poder" or "podería" depending on the level of formality you want to convey**
- **Add "por favor" at the end for extra politeness**

NOW A VIDEO SHOWING SOME USES OF CHATGPT AND BARD

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=-FOPYSGFDZC](https://www.youtube.com/watch?v=-FOPYSGFDZC)

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CREATING A LETTER OR REPORT ON ANY TOPIC + MUCH MORE

LETS TAKE A LOOK AT CHATGTP AND BARD IN ACTION

[HTTPS://BARD.GOOGLE.COM/CHAT/9DB56EBF71](https://bard.google.com/chat/9DB56EBF71)

[HTTPS://CHAT.OPENAI.COM](https://chat.openai.com)

VIRTUALLY ANYTHING YOU CAN THINK OF!

3 A.I. IN THE NEAR FUTURE SYSTEMS TO ADDRESS MORE AREAS

In the legal field, GPT-4 is already proficient enough to ace the bar exam, and the accounting firm PricewaterhouseCoopers plans to roll out an OpenAI-powered legal AI System to its staff

At the same time, companies like OpenAI, Google and Meta are building systems that let you instantly generate images and videos simply by describing what you want to see

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A.I. IN THE LONGER TERM

For companies like OpenAI and DeepMind, a lab that's owned by Google's parent company, the plan is to push this technology as far as it will go

They hope to eventually build what researchers call artificial general intelligence, or A.G.I. — a machine that can do anything the human brain can do

As Sam Altman, OpenAI's chief executive, told me three years ago: "My goal is to build broadly beneficial A.G.I. I also understand this sounds ridiculous."

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THE RISKS OF A.I

But some have been warning for decades about a darker scenario, where our creations don't always do what we want them to do, or they follow our instructions in unpredictable ways, with potentially dire consequences



The group found that the system was able to hire a human online to defeat a Captcha test



Testers also showed that the system could be coaxed into suggesting how to buy illegal firearms online and into describing ways to make dangerous substances from household items



The basic methods used to build these systems are widely understood, and other companies, countries, research labs and bad actors may be less careful

16 YOU CAN ADD SERIOUS EXPERTISE TO CHAT

- On a recent evening, Anil Gehi, an associate professor of medicine and a cardiologist at the University of North Carolina at Chapel Hill, described to the chatbot the medical history of a patient he had seen a day earlier, including the complications the patient experienced after being admitted to the hospital
- The description contained several medical terms that lay people would not recognize
- It still needs experts like Dr. Gehi to judge its responses and carry out the medical procedures

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17 ONE EXAMPLE OF THE FUTURE- AI BASED NEWS SERVICE COMING- CHANNEL I

- This will be a fully personalized, localized news aggregation service; Channel I isn't using AI to produce its own news stories
- Instead, it'll round up human reporting by "trusted sources" around the world, then re-package it as fully narrated, hosted and edited news stories that'll run together in a list curated to your personal topics of interest, complete with footage and images from the event, like a personal TV station

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- As well as creating video footage and images to go along with reports, the AI can be used to translate eyewitness reports into any language, complete with appropriate lip movements, and maintaining the vocal character of the original speaker
- "Channel I has developed a unique new way to gauge sentiment," says another fake presenter, [Watch: Channel I's newscast demo impresses with AI-generated anchors \(newsbytesapp.com\)](#) "and it leverages our AI's ability to read and analyze data almost instantly. I quickly read the most recent 30,000 tweets posted to X about the Cybertruck, and based on the emojis people have been using, sentiment on the vehicle is indeed very mixed."
- [Watch: Channel I's newscast demo impresses with AI-generated anchors \(newsbytesapp.com\)](#)

GENERATIVE AI IS THE FUTURE – EMBRACE IT

- Some aspects are scary- Fiction vs Fact
- Some aspects will be disruptive-Jobs and entire businesses will change
- BUT
- Generative AI is here and all of us can use it in many ways!
- Have Fun and Enjoy!