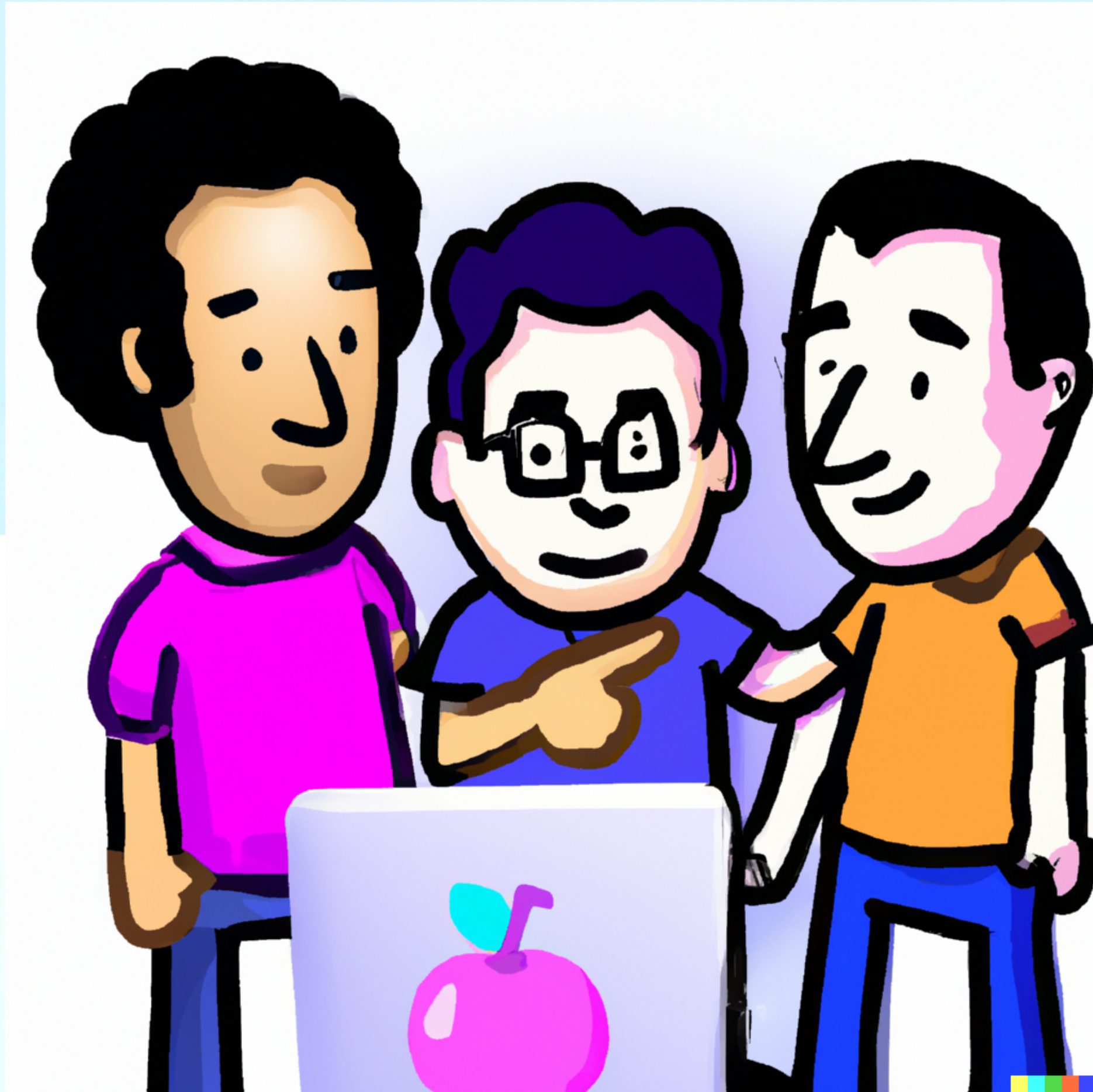


Two stylized palm trees in a light blue color, positioned behind the text.

# **THE VILLAGES** **APPLE** **USER GROUP**

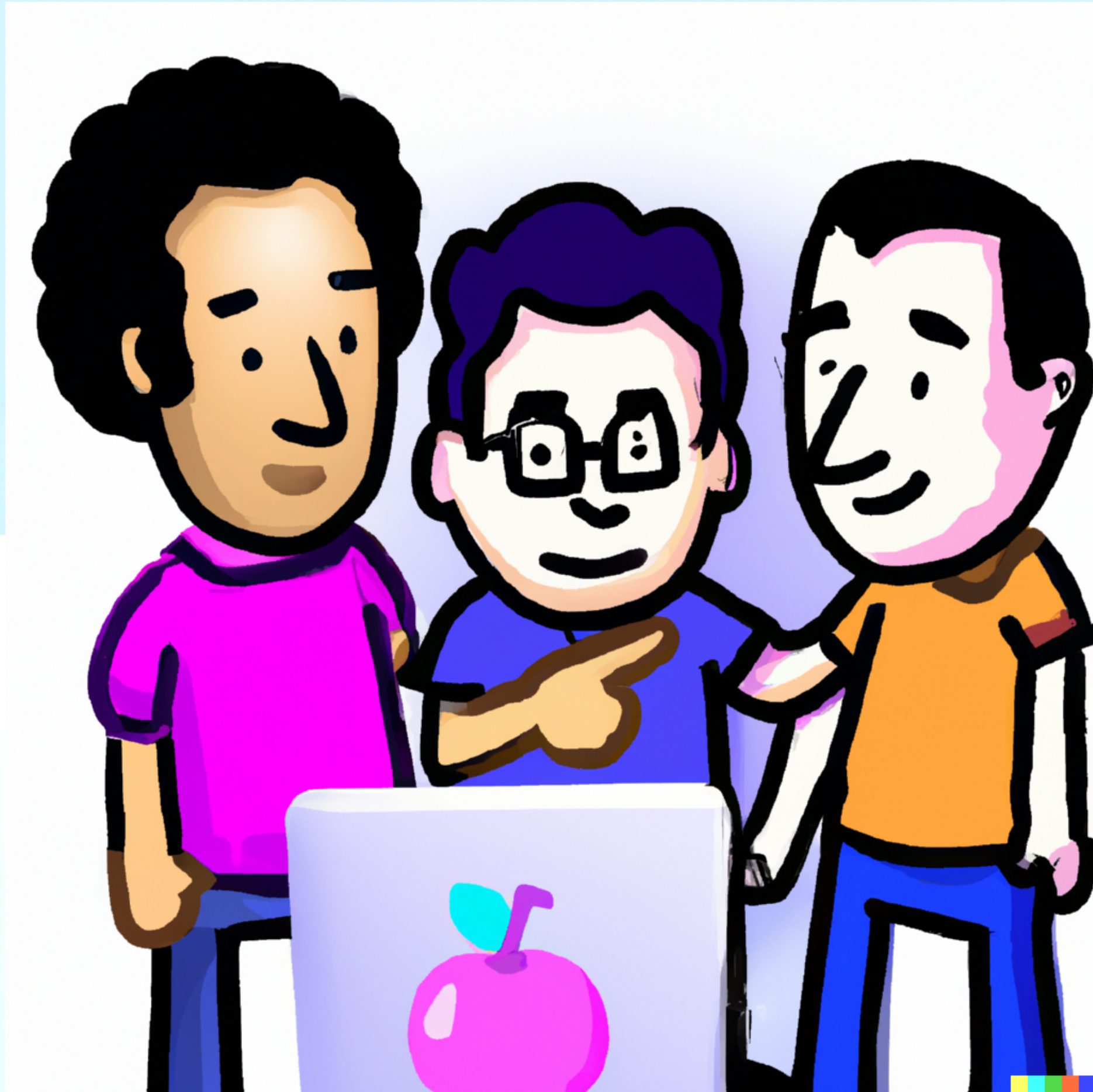




Tom Bonanno  
Bruce Mitchell  
Bill Edwards

4.18.2023





Brave pioneers on a new  
and ever changing topic





# **AI (Artificial Intelligence) 101**

## **Innovation moving at the speed of light**





This presentation has four chapters with  
pauses in-between for questions

Page numbers are on the bottom of each  
slide for references

At the end we will have a round table  
discussion about the technology





# Please fasten your seatbelts.....



Imagine that you have a **very smart friend**



Imagine that your friend is a **writer**



Imagine that your friend is also a **lawyer**



Imagine that your friend is also a **software programmer**



**Imagine that your friend is also an **artist****



**Imagine that your friend is also a doctor**



Imagine that your friend is a **computer**



**My wife and I call our “smart friend”.....HAL**



# My wife and I planned a party.....

We needed to create a toast to a couple on their first child and  
We wanted a special present for the baby

The new mom was from Ukraine

The new dad was from Venezuela

They speak 4 languages in the house

They read grandma's Ukrainian night time story to the baby





# My wife and I planned a party.....

My wife and I needed to create a toast to a couple on their first child and  
We wanted a special present for the baby

The new mom was from Ukraine  
The dad was from Venezuela  
The speak four languages in the house



We asked “HAL” to create a toast....and to create a custom story book  
about a boy born in Tampa, and  
have it written combining English, Russian and Spanish language



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We asked “HAL” to create a toast.. and to create a custom story book about a boy born in Tampa, and  
have it written combining English, Russian and Spanish language



“HAL” wrote the custom 6 line toast in 8 seconds

“HAL” wrote the custom 5 page child’s book in 42 seconds



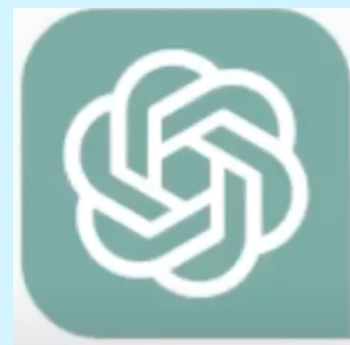
# ChatGPT & DALL-E

(2022)



WE

Create a child's story about a boy named Andre, growing up in Tampa.  
Write the story with a mix of English, Russian and Spanish sentences



Andre was a happy child born in Tampa. Он любил играть в футбол с друзьями на улице. Pero un día, mientras jugaba, Andre found a strange object. Это был красочный кусок камня. He didn't know what it was, but he knew it was special. Andre decided to show it to his parents.

"Мама, папа, посмотрите что я нашел!" said Andre, showing them the stone. His parents were amazed by its beauty. "¿Qué es eso, Andre?" asked his father. Andre shrugged his shoulders, "I don't know, but I think it's magical."



**In the beginning.....**



# OpenAI

(2015)





OpenAI is an AI Research and deployment company.

Our mission is to ensure that artificial intelligence benefits all of humanity.



# CHATGPT



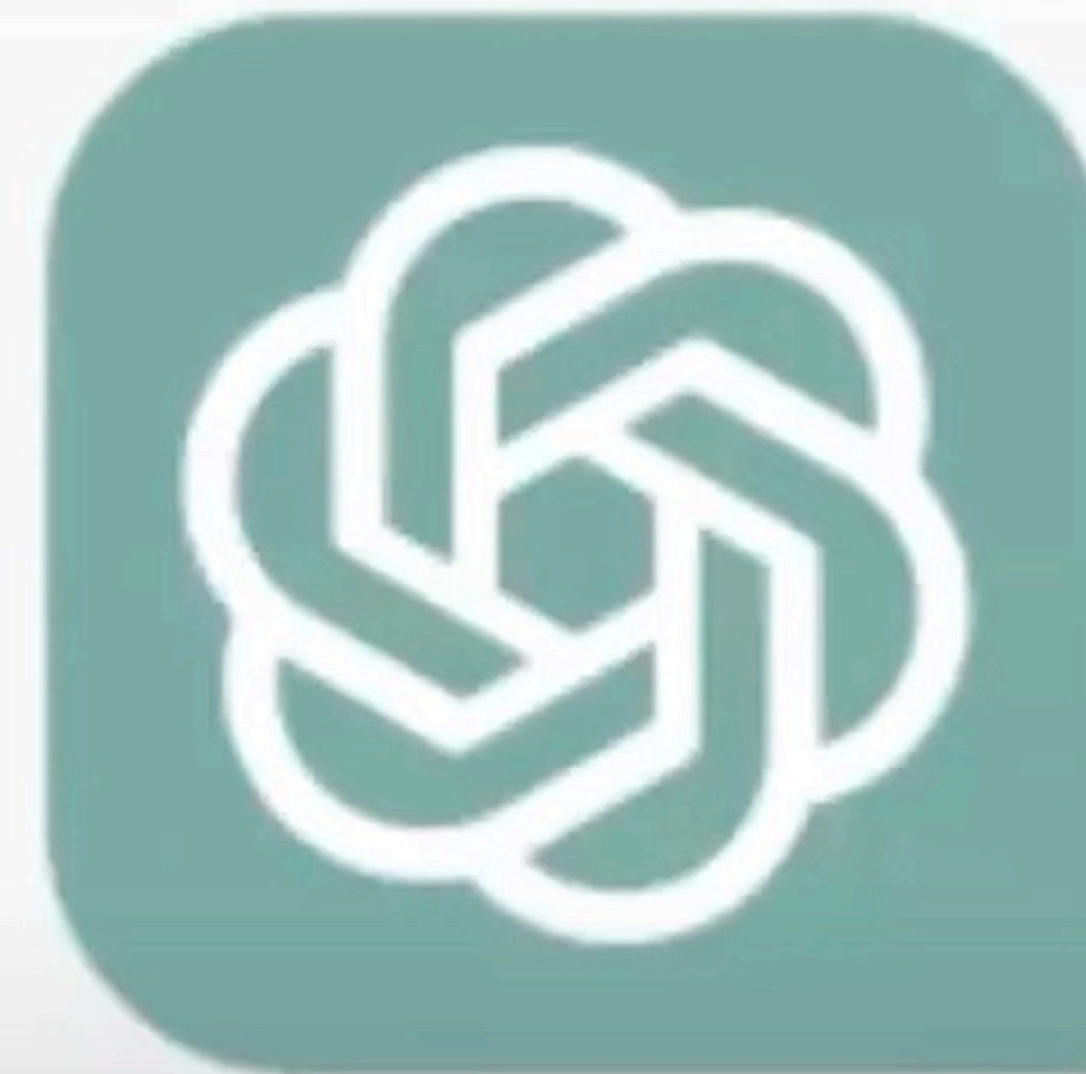
(Chat Generative Pre-Trained Transformer)





# CHAT GPT

- Launched in November 2022
- Build on Open AI GPT-3
- Gained 1 million users in 6 days.
- 10 million users Jan. 2023
- Detailed responses and articulate answers
- Uneven factual accuracy
- Free and paid plan
- Chat GPT 4 released on March 13



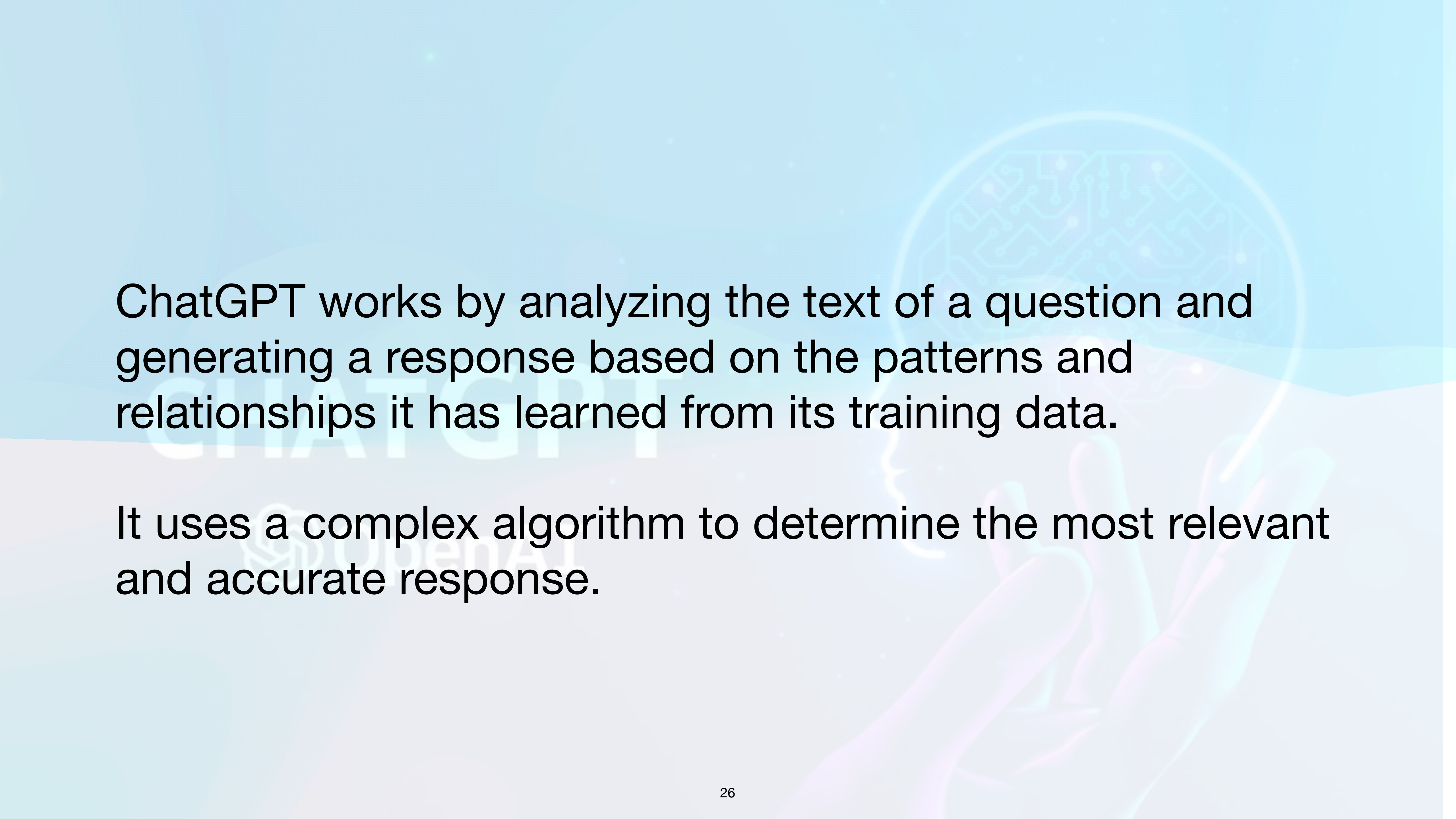
transformer)



**ChatGPT is a large language model developed by OpenAI that is capable of generating human-like responses to natural language queries.**

**It is trained on a massive dataset from text books and from the internet. It is constantly learning and improving its ability to answer questions.**





ChatGPT works by analyzing the text of a question and generating a response based on the patterns and relationships it has learned from its training data.

It uses a complex algorithm to determine the most relevant and accurate response.



Microsoft commits to multi-billion dollar investment

GPT4 is introduced

(2023)





Microsoft Azure Supercomputer





The power of creative art !

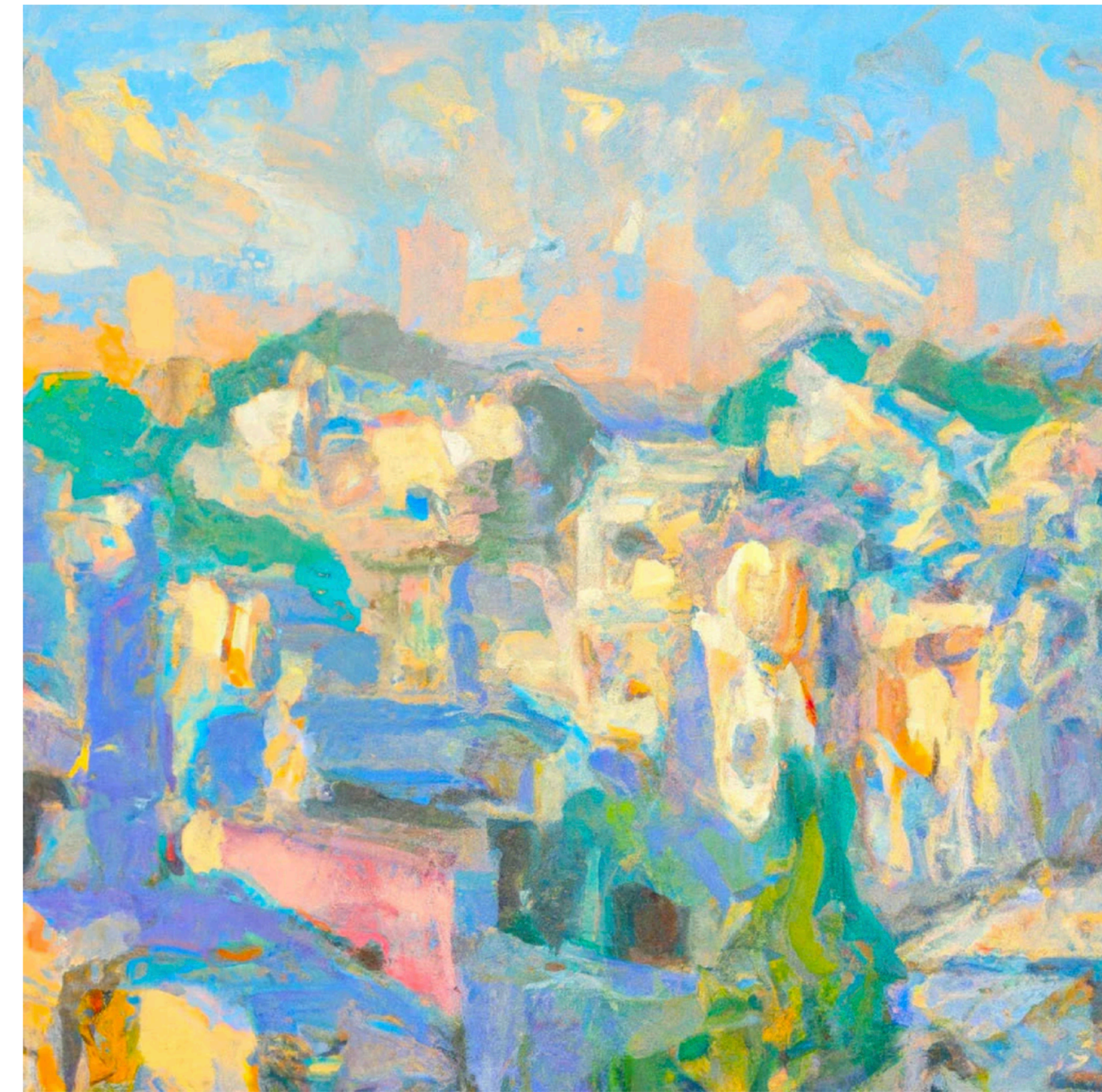




# DALL-E

## Creates pictures

You describe what you want in detail and style  
It creates four custom pictures.....



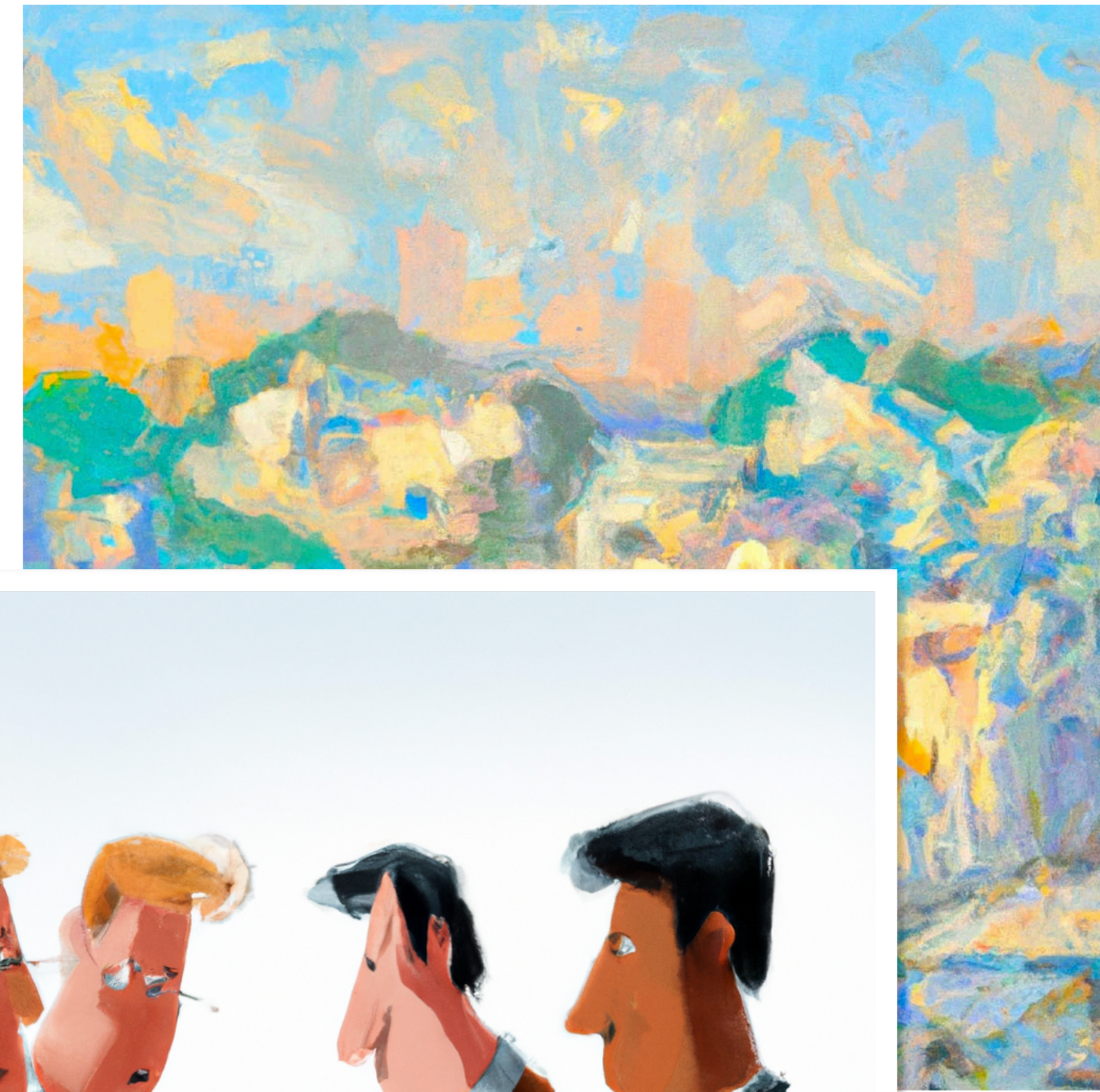
City, in French Impressionists style



# DALL-E

## Creates pictures

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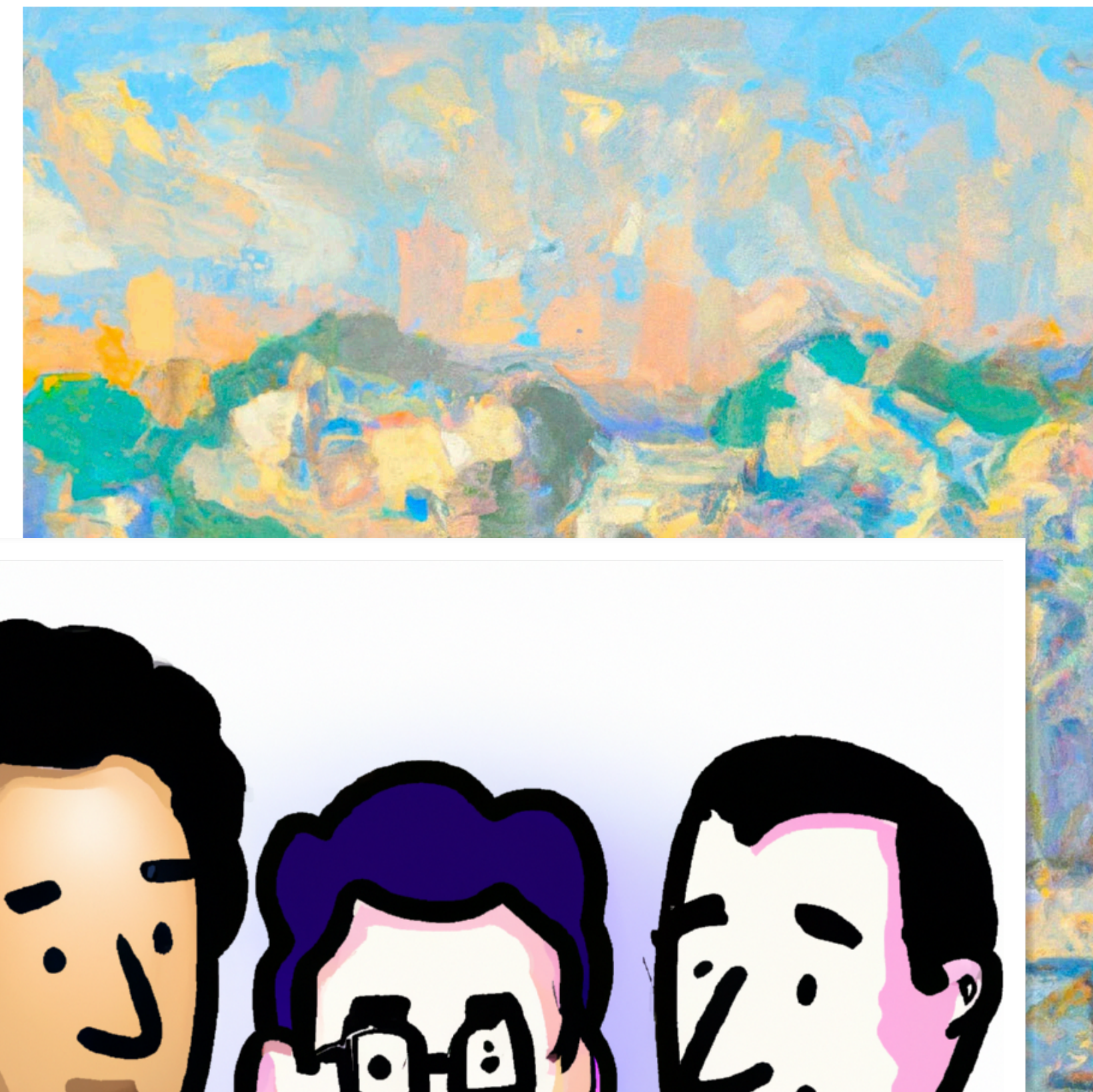




# DALL-E

## Creates pictures

You describe what you want in detail and style  
It creates four custom pictures.....







 **OpenAI**  
**DALLE-2**

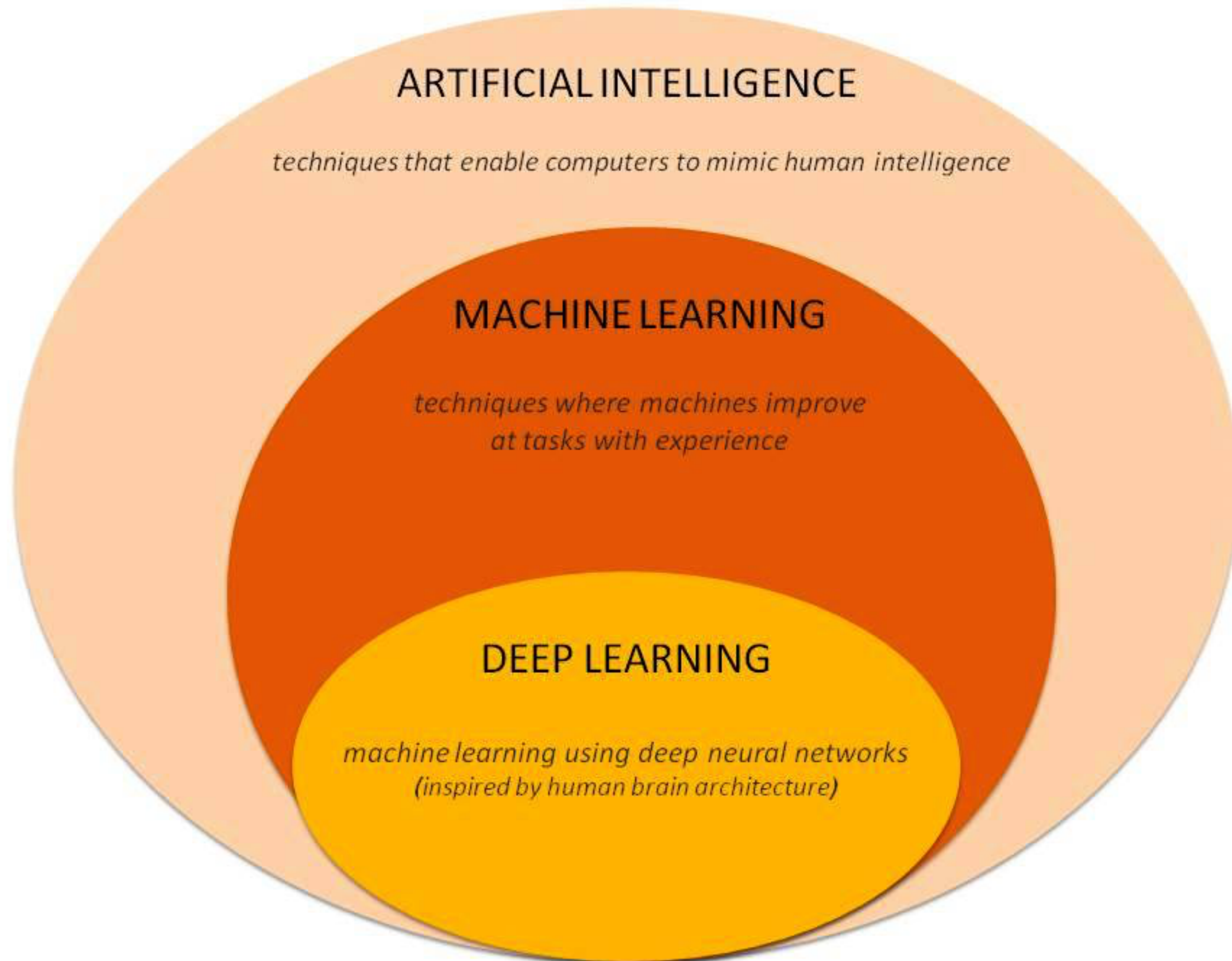


# Questions so far?

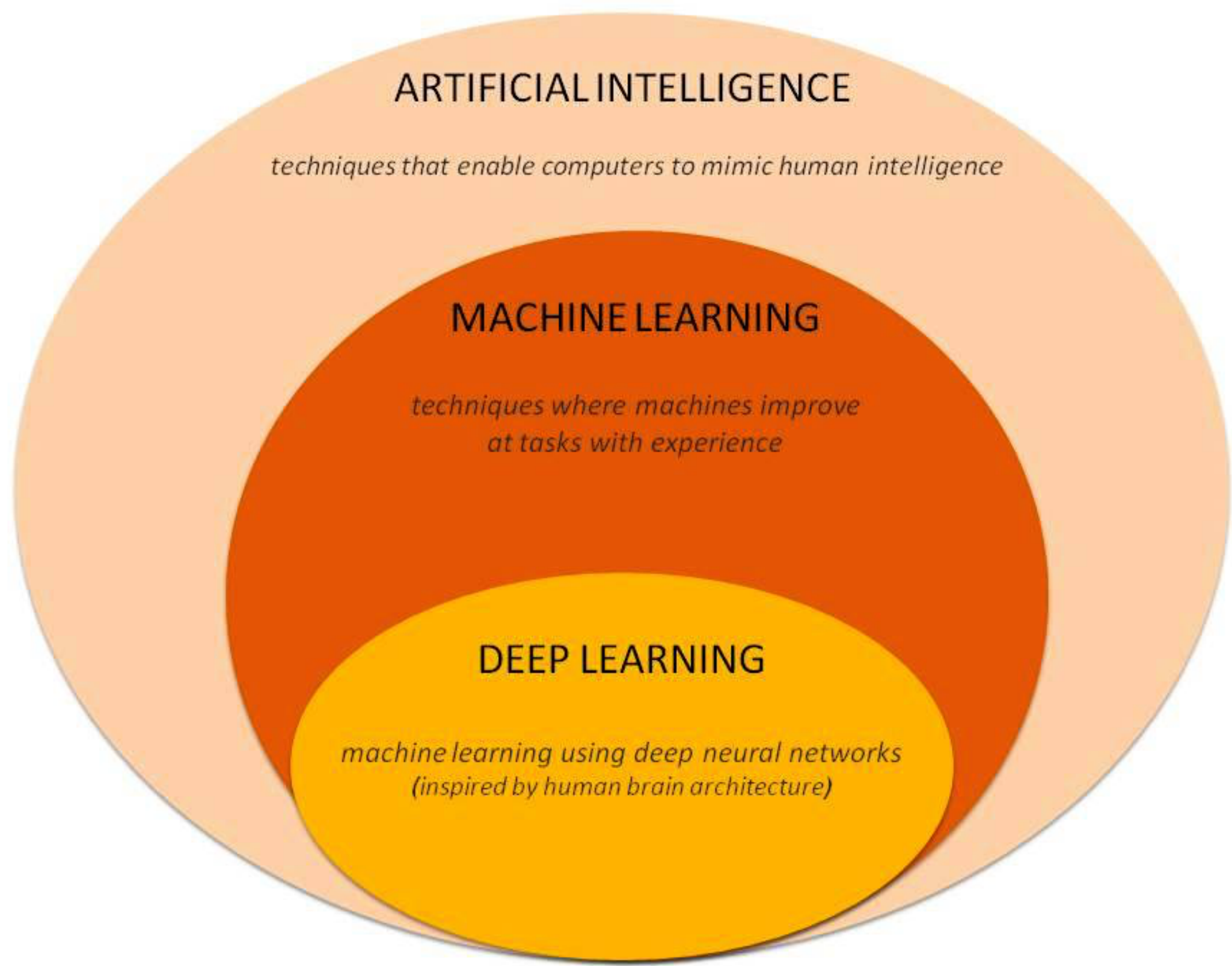


# The vocabulary



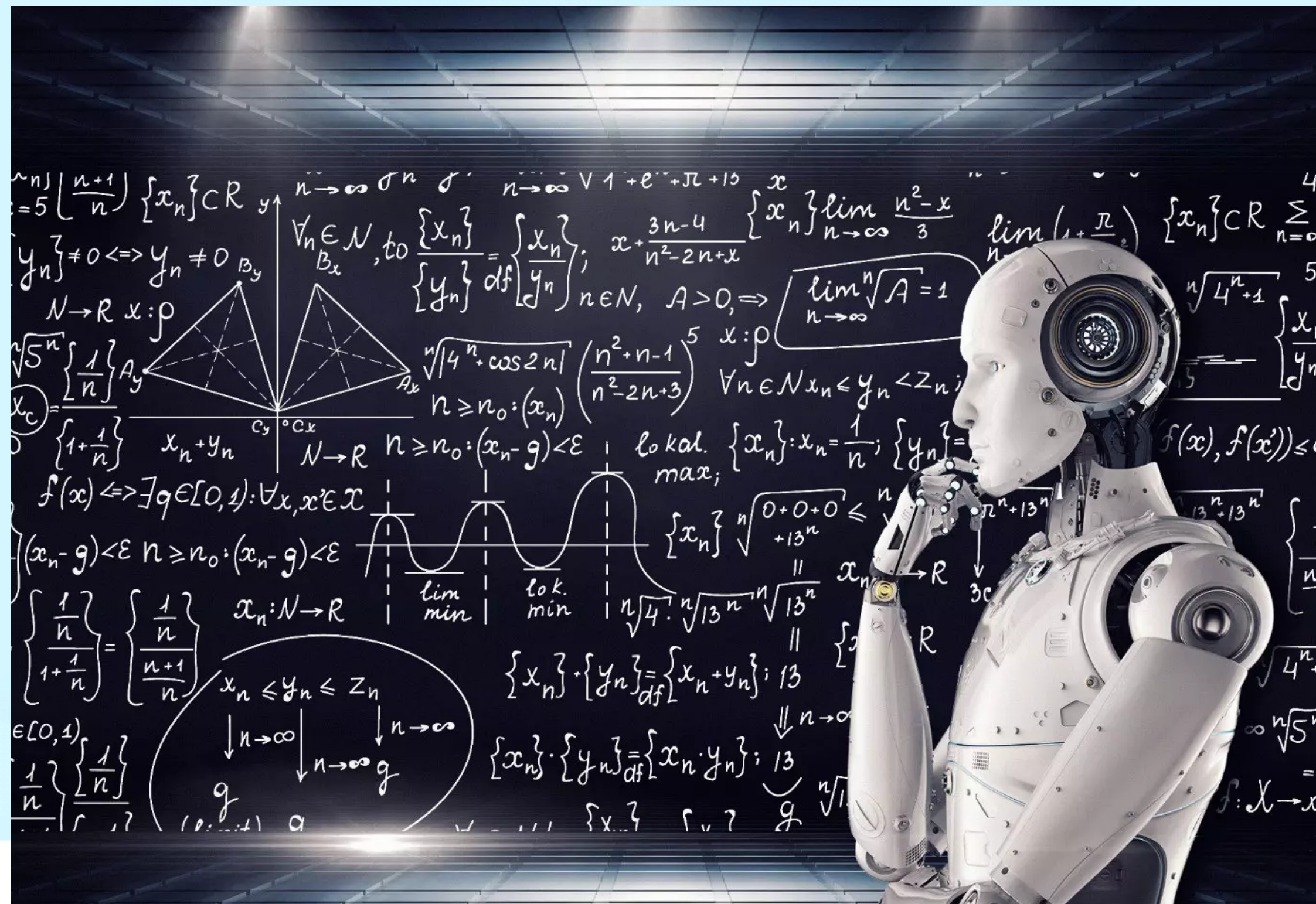






**Machine learning** refers to the subsection of AI that teaches a system to make a prediction based on data it's trained on. An example of this kind of prediction is when DALL-E is able to create an image based on the prompt you enter by discerning what the prompt actually means. Generative AI is, therefore, a machine-learning framework.





An **AI algorithm** is an extended subset of machine learning that tells the computer how to learn to operate on its own. In turn, the device continues to gain knowledge to improve processes and run tasks more efficiently.





**Generative AI** is a straightforward concept. All it refers to is algorithms that generate or create an output, such as text, photo, video, code, data, and 3D renderings, from data they are trained on. The premise of generative AI is to create content. OpenAI's ChatGPT and DALL-E use generative AI to produce new content.



Apple's Silicon chips rely on machine learning in our newer Macs, iPhones and iPads.

Apple talks about the neural engine to perform tasks.

It is the process of teaching a computer system to automatically learn from data, without being programmed.



# Questions so far?



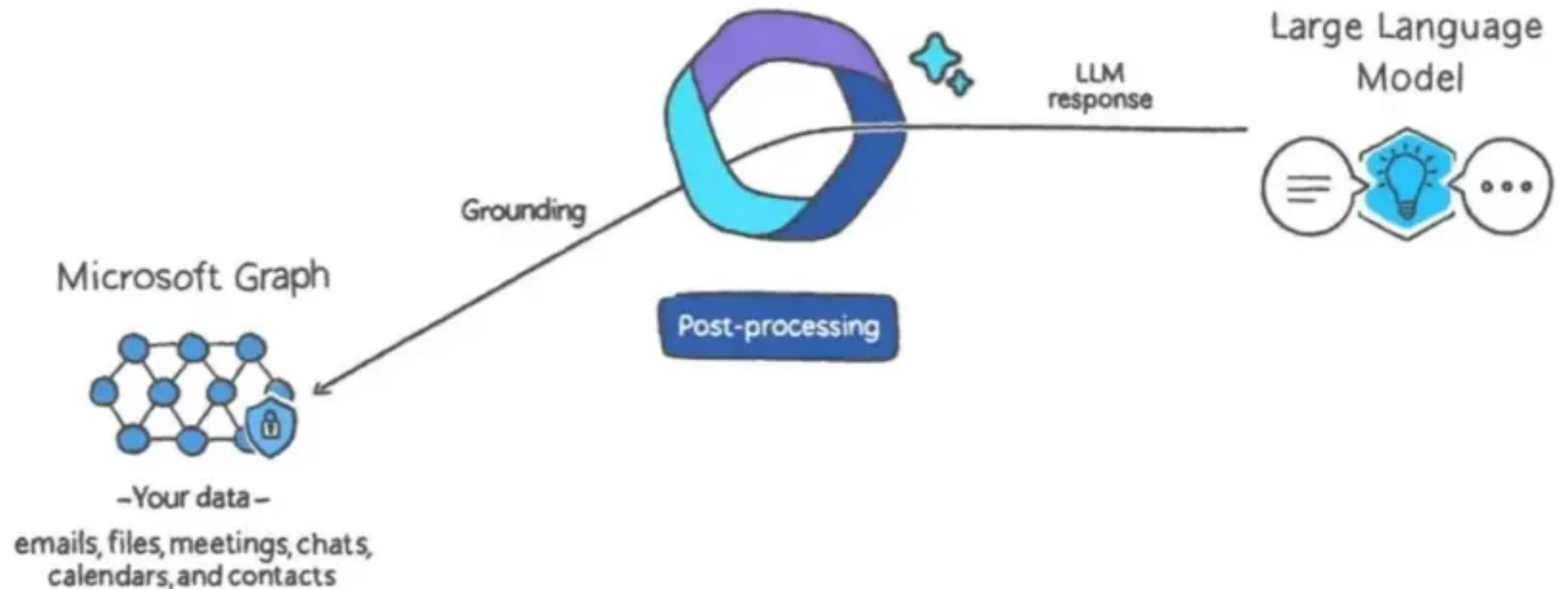
# Coopetition



Microsoft 365 Apps



## Microsoft 365 Copilot



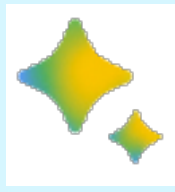
Microsoft 365 integration with A.I. ....Called Copilot



Google







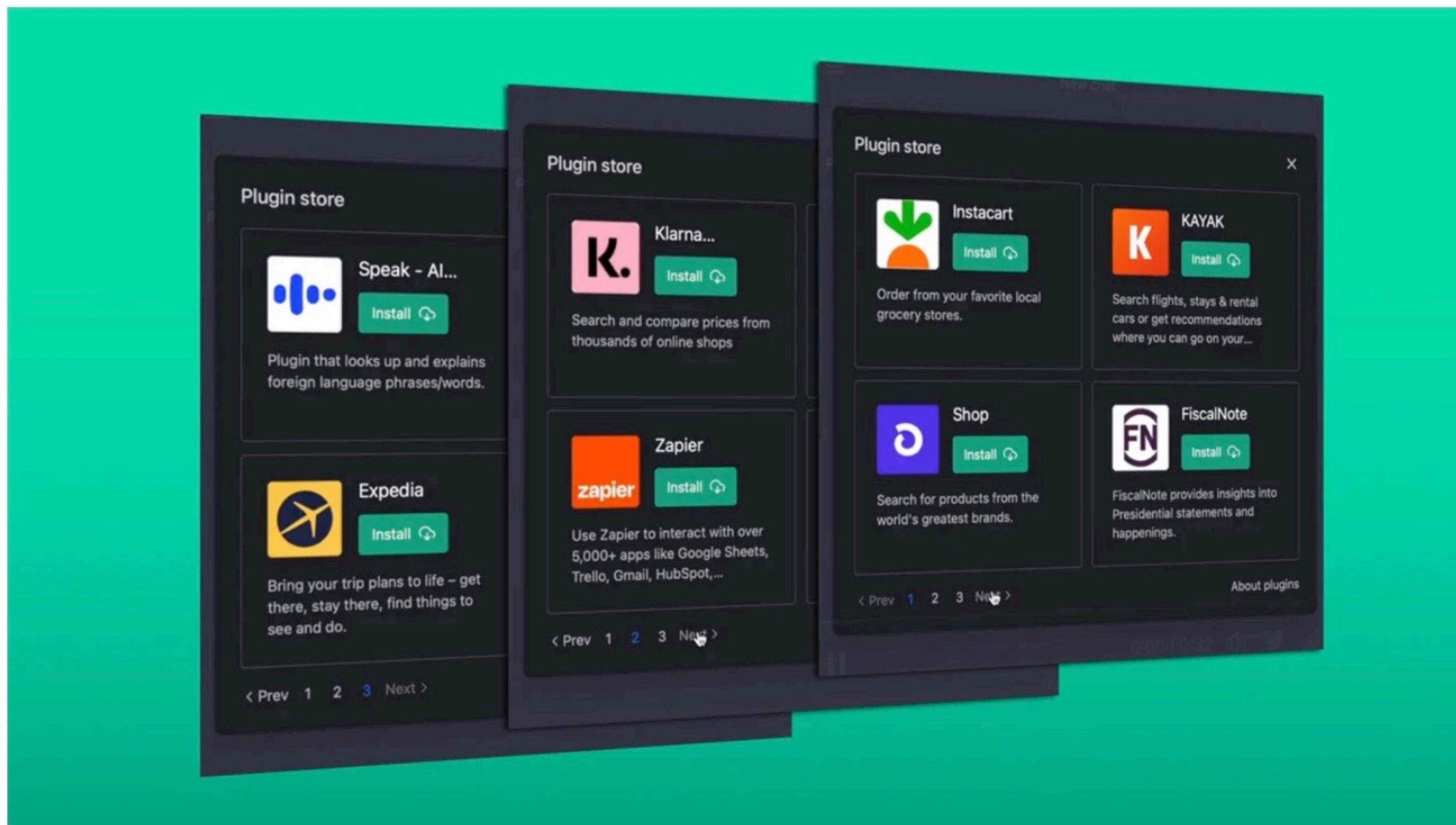
Bard and ChatGPT are both large language models, but they have some key differences.

- Bard is trained on a dataset of text and code that is constantly being updated, while ChatGPT is trained on a static dataset. This means that Bard has access to the latest information and can generate more accurate and up-to-date responses.
- Bard is designed to be informative and comprehensive, while ChatGPT is designed to be creative and engaging. This means that Bard is better at answering questions and providing factual information, while ChatGPT is better at generating creative text formats, like poems, code, scripts, musical pieces, email, letters, etc.
- Bard is still under development, while ChatGPT is a more mature product. This means that Bard may not be as reliable or consistent as ChatGPT, but it has the potential to be even more powerful and versatile.

Overall, Bard and ChatGPT are both powerful language models with their own strengths and weaknesses. The best choice for you will depend on your specific needs.



OpenAI's plugins could represent the second major phase in the rise of AI chatbots.



[Screenshots: OpenAI]

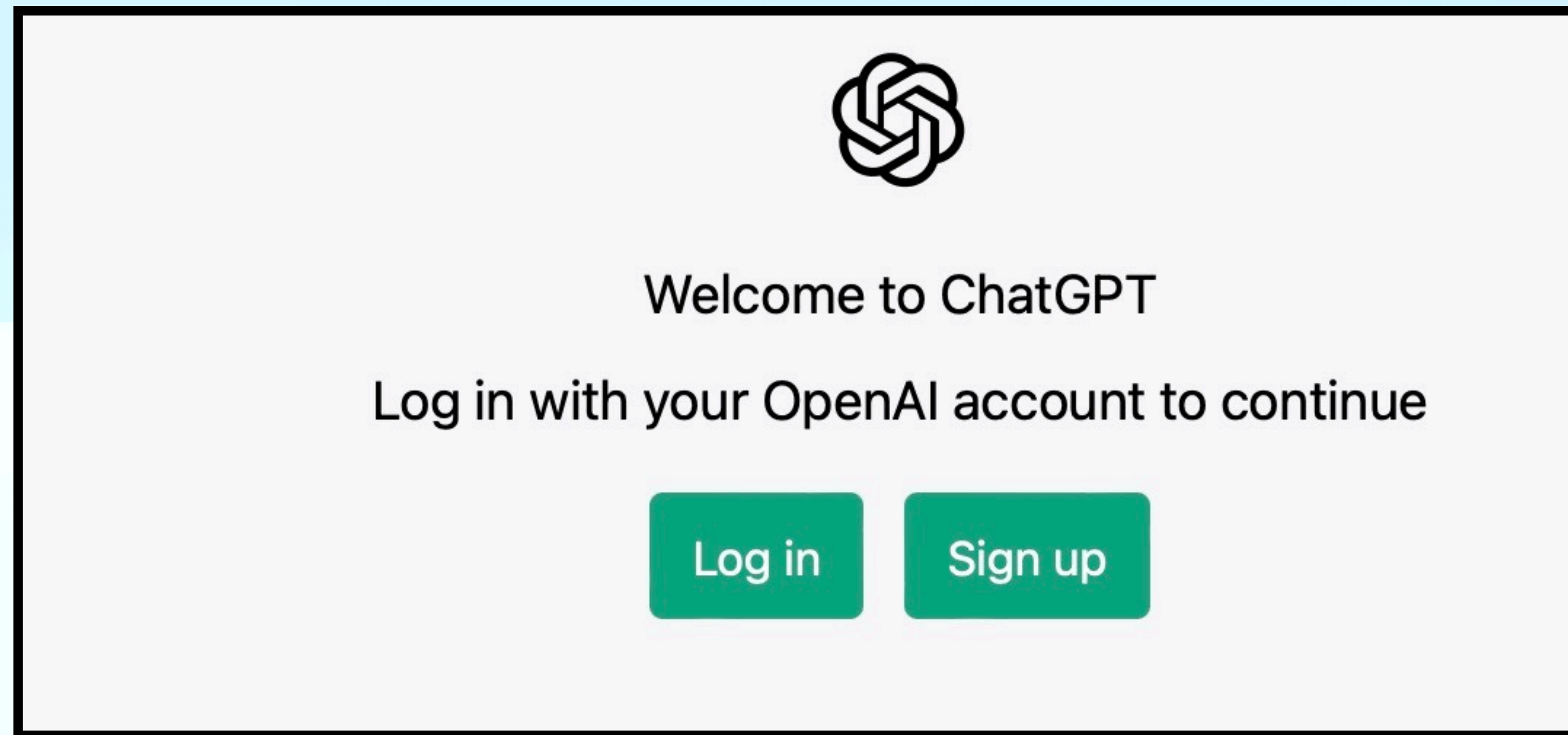


So.....how do YOU find and use our new smart friends ?



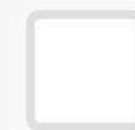
First you need to sign up to create an account

In your browser.... <https://chat.openai.com/auth/login>



Enter user name and password





Verify you are  
human



**CLOUDFLARE**  
Privacy •





## Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



## Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



## Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021





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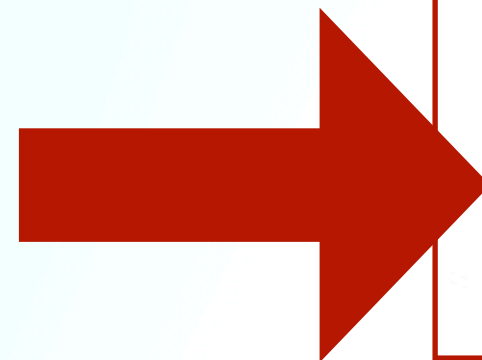
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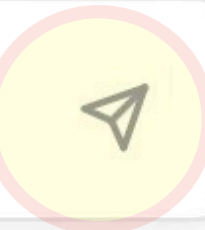
May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

Type your query here



What are the features of The Villages Apple User Group?



Then Click Send



## What are the features of The Villages Apple User Group?



The Villages Apple User Group is a community of Apple product users based in The Villages, Florida. The group aims to help members learn more about Apple products and share their knowledge with others. Some of the features of The Villages Apple User Group include:

1. Regular meetings: The group holds monthly meetings where members can learn about new Apple products, get help with troubleshooting issues, and share their experiences with other members.
2. Presentations: The group invites guest speakers to present on a variety of topics related to Apple products, such as the latest updates to macOS and iOS.
3. Workshops: The group also hosts workshops where members can get hands-on help with specific tasks, such as setting up an iCloud account or organizing their photos.
4. Online forum: The group has an online forum where members can ask questions, share tips, and connect with other Apple users in the community.
5. Newsletter: The group sends out a monthly newsletter with updates on upcoming events, tips and tricks for using Apple products, and news about the latest Apple releases.

Overall, The Villages Apple User Group provides a supportive community for Apple product users in The Villages to learn, share, and connect with others who share their passion for technology.



WE

Please provide an example of a program written to control a robot arm?



```
10 REM Robotic Arm Control Program
20 REM Initialize Variables
30 LET BASE_ANGLE = 0
40 LET SHOULDER_ANGLE = 0
50 LET ELBOW_ANGLE = 0
60 LET WRIST_ANGLE = 0
70 LET GRIPPER_STATE = 0
80 REM Main Program Loop
90 DO
100  REM Read Input
110  INPUT "Enter Base Angle (0-180 degrees): ", BASE_ANGLE
120  INPUT "Enter Shoulder Angle (0-180 degrees): ", SHOULDER_ANGLE
130  INPUT "Enter Elbow Angle (0-180 degrees): ", ELBOW_ANGLE
140  INPUT "Enter Wrist Angle (0-180 degrees): ", WRIST_ANGLE
150  INPUT "Enter Gripper State (0=Open, 1=Closed): ", GRIPPER_STATE
160  REM Process Input
170  REM Send Commands to Robotic Arm
180  REM Wait for Response
190 LOOP UNTIL GRIPPER_STATE = 2
200 END
```





# ChatGPT is at capacity right now

[Get notified when we're back](#)

**Write a screenplay about the status of ChatGPT.**

INT. CHATGPT SERVER ROOM - DAY

Chelsea and Chester stand in front of a large computer server.

CHELSEA: We need to figure out what's causing the server overload.

CHESTER: I think it's the sudden influx of users trying out ChatGPT.

Chelsea and Chester quickly get to work, typing on their laptops.

CHELSEA: Okay, we're all set. Let's see if this fixes the problem.

CHESTER: I'm hitting refresh on the website.

The screen shows the ChatGPT website loading without any errors.

CHELSEA: Looks like we fixed it! Great job, Chester.

CHESTER: Thanks, Chelsea. It's all part of being a top-notch engineer.

Chelsea and Chester exchange a high five, proud of their successful fix.



- Your new smart friend may be on drugs when you chat and hallucinate
- Since this is moving so fast, regulation is a moving target
- Bias in the answers is ongoing as part of the learning process
- Filtering off inappropriate questions, like how to make an atom bomb
- You are learning from it, and it's learning from you.... What is it learning?



# Elon Musk, Other AI Experts Call for Pause in Technology's Development

Appeal causes tension among artificial-intelligence stakeholders amid concern over pace of advancement

Deepa Seetharaman March 29, 2023 at 8:33 am ET -WSJ

Several tech executives and top artificial-intelligence researchers, including [Tesla](#) Inc. Chief Executive Officer [Elon Musk](#) and AI pioneer Yoshua Bengio, are calling for a pause in the breakneck development of [powerful new AI tools](#).

“We’ve reached the point where these systems are smart enough that they can be used in ways that are dangerous for society,” Mr. Bengio, director of the University of Montreal’s Montreal Institute for Learning Algorithms, said in an interview. “And we don’t yet understand.”



# Questions so far?




“It sounds like a genius but is really a parrot.”

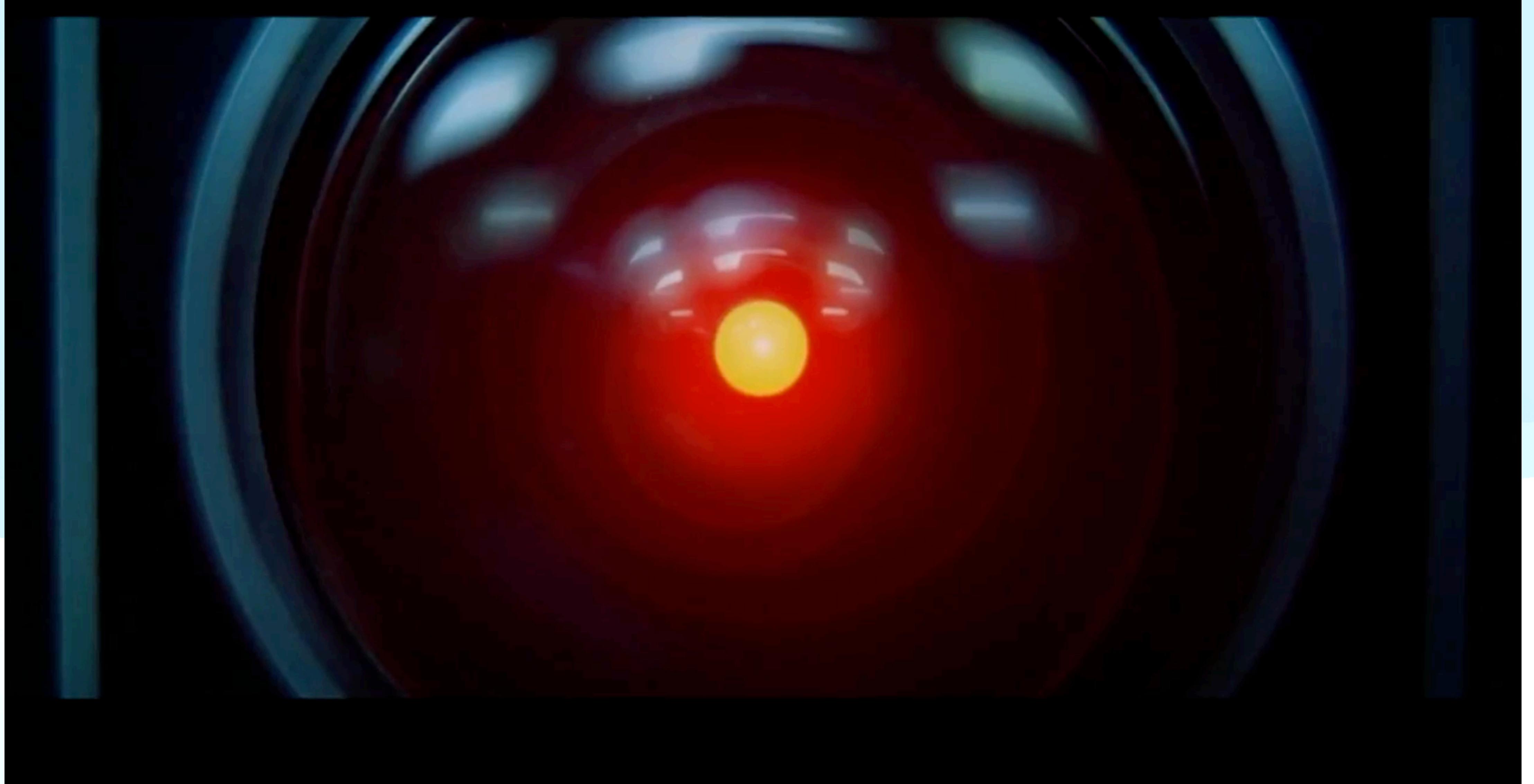




A DAY IN THE LIFE OF ARTIFICIAL INTELLIGENCE

 TODAY





“I’m sorry Dave, I’m afraid I can’t do that.”

2001: A Space Odyssey

1968 release





# Thank-you !

