

Generative Artificial Intelligence



Photo realistic image of a futuristic robot resembling a white egg floating within a slick media agency office in the UK

Why should we pay attention?

What do these new systems do?

How can we start using them?





CULTURE MATTERS

ChatGPT passes MBA exam given by a Wharton professor

The bot's performance on the test has "important implications for business school education," wrote Christian Terwiesch, a professor at the University of Pennsylvania's Wharton School.

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Generative

Generate Text

Large Language Models (LLMs)



Hugging Face

Generative Images

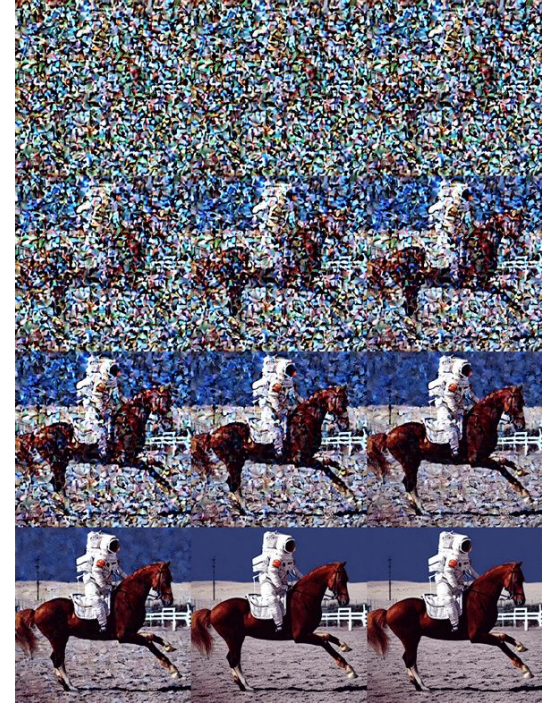
Diffusion Models



Image generation – Stable Diffusion

Most of the new AI image generation techniques use a process called stable diffusion.

This uses an image classification neural network trained on existing images, then passing it random noise, seeing how closely that matches the target output and iteratively altering the input until we have a good match.



Dall-e

The Avocado chair



It seems to understand what a chair is, and also what the 'essence' of an Avacardo

Prompting

To use them, you need to input text (the “prompt”) describing what you want. It’s important to add the right details to make your request specific enough. For example:

<Beautiful countryside landscape in Ireland, green hills, small houses made of stone, ultra realistic, HD, 8K real life - --ar 16:9>



From mind to screen in minutes



Large Language Models (LLMs)



what is a large language model?



A Large Language Model (LLM) is a type of artificial intelligence program that specializes in understanding and generating human language. Built on a structure known as a neural network—think of it as a simplified, computerized version of our brain—these models are trained on vast amounts of text data to learn the intricacies of language. They can perform various tasks like answering questions, assisting in writing, translating languages, summarizing text, and much more.



Large Language Models (LLMs)

You
write a haiku about using AI to help charities

ChatGPT
AI's gentle hands,
Weaving hope with data strands,
Charity expands.

You
generate an illustration to go with this haiku

You
make it a hand drawn illustration with black pen in a japanese style



AI's gentle hands
Weaving hope with data strands,
Charity expands.

How LLMs work

Aim: Produce a “reasonable continuation” of whatever text it’s given

How: Take some text and predict the next token (word fragment)

The best thing about AI is its ability to

learn	4.5%
predict	3.5%
make	3.2%
understand	3.1%
do	2.9%

Large Language Models (LLMs)

The best thing about AI is its ability to,

The best thing about AI is its ability to learn,

The best thing about AI is its ability to learn from,

The best thing about AI is its ability to learn from experience,

The best thing about AI is its ability to learn from experience.,

The best thing about AI is its ability to learn from experience. It,

The best thing about AI is its ability to learn from experience. It's,

The best thing about AI is its ability to learn from experience. It's not

Large Language Models (LLMs)

The best thing about AI is its ability to learn and develop over time, allowing it to continually improve its performance and be more efficient at tasks. AI can also be used to automate mundane tasks, allowing humans to focus on more important tasks. AI can also be used to make decisions and provide insights that would otherwise be impossible for humans to figure out.

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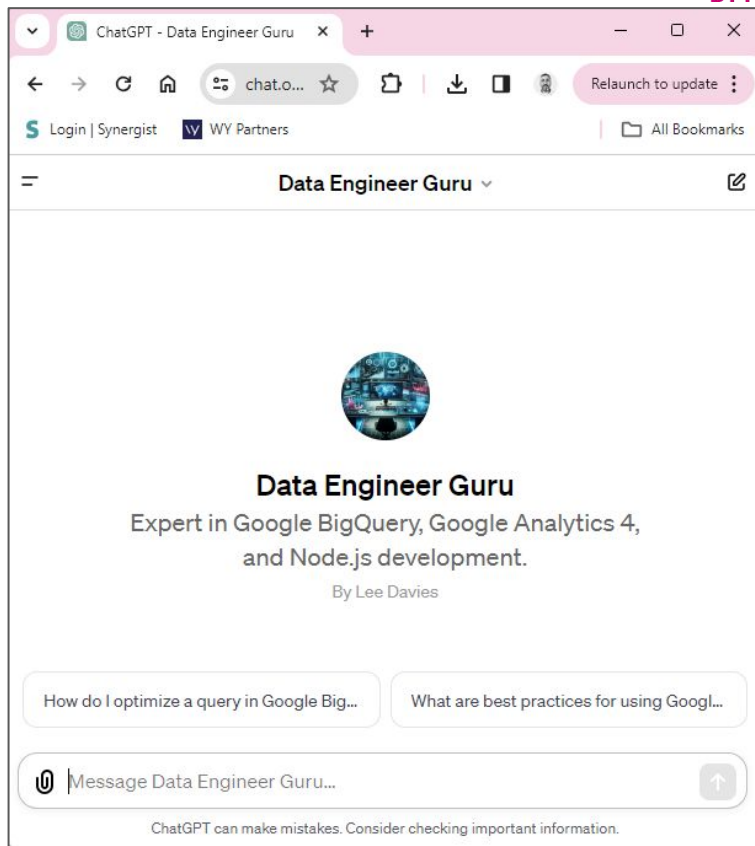


Tasks you can use these systems for today

- Copywriting, Summarisation
- Chatbots / conversational UI
- Image generation
- Ideation
- Report writing
- Grant Applications
- Query data using language
- Writing code

Custom GPTs

- Give it a personality
- Explain what types of task you want it to carry out
- Provide it with some data file(s)
- Give it a name and an image
- Provide some example suggested prompts



Explorers not experts

