

How ChatGPT Works

Here we discuss ChatGPT's uncanny ability to understand our prompts and predict answers.

In the last two articles on ChatGPT, we prompted the “chatbot” to provide a table of foods ranked by LDL and recipes for pancakes.

Now we'll ask ChatGPT how it works:



In 50 words or fewer, explain how ChatGPT works.



ChatGPT is an AI language model that uses deep learning to generate human-like responses. It's trained on a massive amount of text from the internet and learns patterns to understand and generate coherent replies. It predicts the most probable next word based on the context provided by the user's input.

Cool. But what does that mean?

I'll break it down for you:

GPT stands for *Generative Pre-trained Transformer*, which is **computer software that mimics our brain's ability to understand word and sentence structure from context** rather than a dictionary.

It does this by digesting vast volumes of text on the internet, including Wikipedia and myriad websites, and “learning” word patterns and structures (hence the term “language model.”) We humans do this all time when we understand the meaning of words and phrases based on their context within the broader discourse. In fact, this is how children learn a language.

If we don't understand a concept at first blush, we'll consult enough sources until we're satisfied that we've found a consensus and then assume that's the correct answer.

ChatGPT does the same thing—but it pre-trained itself by building a context database of the entire internet¹ from which it can process our questions. That database is, in essence, a neural network that can predict an answer based on the word patterns it's already built. In other words, ChatGPT doesn't simply look up the recipe for pancakes—it **predicts the correct answer based on the context in which it found the words *how, make, and pancakes*** within the Internet during its pre-training phase. And by pre-training itself on the word patterns, ChatGPT can predict its answers quickly and clearly.

Final Thoughts

I've used ChatGPT to help write mediation agreements, list Supreme Court Cases, and summarize novels I never understood. I've asked it to write poems about ping-pong balls in the style of Edgar Allen Poe and write a computer program that solves polynomials (something I don't do very often.)

You should try it.

And if you need help with ChatGPT, just send a request to our tech volunteers at princetonsenior.wufoo.com/forms/technology-assistance-request.

¹ ChatGPT is based on the Internet as of 2021, which means it doesn't know anything after that.