

ChatGPT's intelligence is zero, but it's a revolution in usefulness, says AI expert



Pascal Kaufmann says the way to measure true artificial intelligence is by its capability for dealing with previously unseen problems.

Written by [Dan Patterson, Contributor](#) on March 31, 2023

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[Generative AI](#) systems like [ChatGPT](#), [DALL-E](#), and Midjourney are poised to revolutionize countless industries. Artificial intelligence expert Pascal Kaufmann said these new AIs are so good at generating text and images that it's easy to overestimate their capabilities.

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Kaufmann, founder of [Starmind.ai](#) and the [Mindfire Group](#) explained that true intelligence is loosely defined as the ability to solve completely novel problems. While it's easy to be impressed by AI's ability to perform tasks like natural language processing, Kaufmann argued that large language models like GPT-3 merely mimic intelligence without truly possessing it. In particular, they lack the capacity to tackle challenges they have yet to encounter before.

For example, these systems can generate poetry and [write code](#) because they've been trained on existing content. But they cannot perform abstract tasks, like understanding humor or feeling empathy.

"There are some people that treat the term 'AI' like it [just means] 'amazing innovation.' So whenever something is amazing, it's called AI," said Kaufmann. "But when you are looking at the scientific and perspective, you can actually measure and define intelligence. Intelligence would be measured as your capability of dealing with unseen problems, unencountered problems. Can you solve something that's completely novel? And the large language models like ChatGPT are not able to tackle anything that it hasn't encountered before. Therefore, its [intelligence] is zero."

Also: [What is ChatGPT and why does it matter? Here's what you need to know](#)

Despite this limitation, Kaufmann acknowledged that new generative models are a significant advance in [AI](#) capability and

could revolutionize a number of industries. He highlighted their ability to produce creative and visual work efficiently, significantly reducing costs and turnaround times. He also suggested that the models can generate more creative solutions to unique problems than humans, thanks to their access to a vast reservoir of information.

Kaufmann pointed to the value of AI in industries such as illustration and filmmaking, where virtual human beings can be generated and controlled more cost-effectively than their real-life counterparts. He also commented on the potential displacement of creative jobs by AI technologies.

In drilling down on the measurement of intelligence, he noted that Mindfire [achieved](#) a world record by solving over 30% of puzzles in an AI IQ test, a significant increase from the previous record of 20%.

He also mentioned the fact that the [GPT-4 upgrade](#) being multi-modal is another important step forward. Kaufmann ultimately characterized the rise of AI models like GPT-3 and GPT-4 as a "usefulness revolution" that will accelerate technological developments.

Also: [How ChatGPT works](#)

"This is really a revolution, and it will accelerate the developments towards human-level AI," said Kaufmann.

However, he clarified that these models are not a direct path to achieving [artificial general intelligence](#) (AGI) -- AI with human-level intelligence.

You can watch our full interview with Kaufmann on [ZDNET](#) or [YouTube](#)