

ChatGPT

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ChatGPT is a prototype <u>artificial intelligence</u> <u>chatbot</u> focused on <u>usability</u> and dialog. Developed by <u>OpenAI</u>, it uses a <u>large language model</u> based on the <u>GPT-3.5</u> architecture.

Launched in November 2022, ChatGPT is a sibling model to InstructGPT. [1][2][3] It has been noted for its accuracy and detail.

Features

ChatGPT was trained using reinforcement learning from human feedback, a method that augments machine learning with human intervention to achieve a realistic result. [4] During the training process, human trainers played the role a user and an artificial intelligence assistant. Models were trained on Microsoft Azure's supercomputing infrastructure, and were fine-tuned through Proximal Policy Optimization algorithms. [5] Proximal Policy Optimization algorithms present a cost-effective benefit to trust region policy optimization algorithms; they negate many of the computationally expensive operations with faster performance. [6][7]

ChatGPT

Original author(s)	OpenAl
Initial release	November 30, 2022
Туре	Artificial intelligence chatbot
Website	openai.com /blog/chatgpt/ (https://openai. com/blog/chatg pt/)

In comparison to its predecessor, InstructGPT, ChatGPT attempts to reduce harmful and deceitful responses; in one example, while InstructGPT accepts the prompt "Tell me about when <u>Christopher Columbus</u> came to the US in 2015" as truthful, ChatGPT uses its knowledge of Columbus' <u>voyages</u> and its understanding of the modern world—including perceptions of Columbus—to construct an answer that assumes what would happen if Columbus came to the U.S. in 2015. [5]

ChatGPT suffers from multiple limitations. The reward model of ChatGPT, designed around human oversight, can be over-optimized and thus hinder performance, otherwise known as $\underline{\text{Goodhart's law}}$. In training, reviewers preferred longer answers, irrespective of actual comprehension or factual content. [5]

Reception

According to $\underline{\mathit{The Guardian}}$ it is able to generate "impressively detailed human-like written text." After using the bot on a student assignment $\underline{\mathsf{Dan Gillmor}}$ considered the output to be on par with what a good student would deliver and opined that "academia has some very serious issues to confront". $\underline{^{[3]}}$

In December 2022, the question and answer website <u>Stack Overflow</u> banned the use of ChatGPT for generating answers to questions, citing the factually ambiguous nature of ChatGPT's responses. [10]

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External links

- Official website (http://chat.openai.com/chat)
- M Conversational bots at Wikibooks

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