

ChatGPT

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ChatGPT is a prototype artificial intelligence chatbot focused on usability and dialog. Developed by OpenAI, it uses a large language model based on the GPT-3.5 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]}

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 Christopher Columbus came to the US in 2015" as truthful, ChatGPT uses its knowledge of Columbus' voyages 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's training data includes man pages and knowledge of Internet phenomena and programming languages, such as bulletin board systems and the Python programming language.^[8]

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 Goodhart's law.^[9] In training, reviewers preferred longer answers, irrespective of actual comprehension or factual content.^[5]

Reception

According to The Guardian it is able to generate "impressively detailed human-like written text."^[10] After using the bot on a student assignment 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".^[3]

In December 2022, the question and answer website Stack Overflow banned the use of ChatGPT for generating answers to questions, citing the factually ambiguous nature of ChatGPT's responses.^[11]

References


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Original author(s)	OpenAI
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Type	Artificial intelligence chatbot
Website	openai.com/blog/chatgpt/ (https://openai.com/blog/chatgpt/)

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External links

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