

Applications of ChatGPT in Scientific Research and Ethical Considerations of Its Use

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ChatGPT is a conversational AI tool developed by OpenAI and introduced in November 2022. This tool generates human-like text responses. Its applications are in various fields, including education, medicine and health, legal issues, coding and program troubleshooting, and scientific research. In these areas, ChatGPT can generate and refine content, simplify and summarize content, help recognize patterns, process and analyze data, and promote collaboration and communication between researchers and the public. In using ChatGPT, several ethical considerations are raised, including data privacy and security, intellectual property and authorship, illegal misuse, transparency and explain ability, false information, biases, human-machine interactions, and responsibility and accountability. Its uncontrolled use can cause problems, and researchers are working to improve its accuracy and reliability. The opinion of international publishers about ChatGPT is that this tool cannot be used as an author in scientific articles and can only be used to improve writing and summarizing and can never take the place of the original researcher. The use of ChatGPT for scientific research has brought great progress that despite several debates and ethical concerns, ChatGPT has attracted the attention of academics in a very short period of time.

Keywords: Artificial intelligence, large language models, research applications, scientific research, ChatGPT, ethical issues



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