

FEATURE ARTICLE - 02

Obedient Research Assistant with [Unintentional] Academic Dishonesty? My Experience with ChatGPT-4

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Introduction

It is indeed correct to say that only by working together for some time can one truly identify the character of another. Collaborating and interacting over an extended period allows both parties to gain insights into each other's strengths, weaknesses, and working styles. This deeper understanding not only fosters stronger working relationships but also enhances the overall effectiveness and efficiency of the collaboration. It is true in any close relationship, and I also realized that it is correct regarding work assistants. Investing time in working together is essential for uncovering the nuances of an assistant's character, leading to a more productive and harmonious partnership. This is the story of my journey through identifying the character of ChatGPT; a natural language processing tool driven by AI technology that allows you to have human-like conversations and much more with the chatbot (Ortiz, 2023). OpenAI developed ChatGPT based on the GPT architecture (*ChatGPT*, n.d.). Chat GPT-3.5 was released in November 2023. It is accessible as a free preview via <https://chat.openai.com>. A more recent version, GPT-4, is accessible upon subscription.

Areas in which ChatGPT Excelled

I started my relationship with ChatGPT in February 2023. Since then, I have used the tool daily while conducting various experiments relevant to my career as a researcher, teacher, and librarian. It's a wonderful

tool! I could write, summarize, and write code for fulfilling daily errands. It categorized word lists, wrote formal letters, and created tables from unorganized data like a pro. I could even use it for various tasks in teaching – creating lesson plans, preparing bulleted lists for presentations, and even building test questions. This included work in narrowly specialized subject domains such as the subjects I taught for the semester; Records Management, Principles of Archives, and Digital Libraries. I was happy to have my ‘learned’ assistant beside me.

Areas Exhibiting Weak Performance

The performance of ChatGPT in responding to my prompts (the commands or instructions given to the chatbot for generating output) was not always excellent. I asked it to provide authors of three famous works as a test. It gave two names correct. The third book was a Sri Lankan novel, *Beddegama* (translated as Village in the Jungle). It stated that the author of the novel is Martin Wickramasinghe. Wickramasinghe is a renowned author who has written his autobiography titled *Ape Gama* (literally translated to English as ‘my village’). But *Beddegama* was written by Leonard Woolf. It is unsure how it confused *Ape Gama* to *Beddegama*.

In another instance, while doubting its capability, I asked ChatGPT to assign a DDC class number to a romantic novel translated from Russian to Sinhala. It assigned a class number with clear instructions and an explanation of how the DDC should be used in this instance. However, an expert on classification later evaluated the skills as ‘novice.’ When the same prompt was given to ChatGPT 4, it generated a much more advanced explanation but still lacked complete expertise in this area. However, the skill of this assistant in completing that specific complex task is encouraging. On a humorous note, let me mention that Librarians need not be alarmed by the news! Let all technical stuff be assigned to robots! Librarians have more important work to do. Of course, they can oversee the work of robots!!

In addition, I used ChatGPT to write a poem on a topic in a specialized academic domain. It sure did! Not one, it wrote a series of poems with the same rigor of a poet. But when I asked it to translate the poems into Sinhala, it showed poor skills. It is understandable since the tool has been trained mainly in English and only a few other languages. To be a Sinhala translator, it needs further training.

A Serious Mistake!

Now I have come to the most interesting observation in this journey. I am a regular researcher. So how did my assistant support that? Of course, as a writing pro, it helps me in various ways – especially as a proofreader. But once I tried to generate a literature review. That is where it failed to the maximum extent!. I asked Chat GPT to create an article with some conditions to limit its scope. The actual prompt is given below.

“Write an article on the use of ChatGPT by academic librarians. Focus on its uses for the developing world. Maintain academic integrity. Limit to 800 words. Provide references with in-text citations.”

It cheerfully generated a text with in-text citations and a reference list as an obedient servant in seconds. It didn't complain at all! It was nice looking, and I thought I had minimal work left. I even added an acknowledgement stating that the article was almost completely written by ChatGPT, including citations. But alas! The references were all false! Because of my experience of getting inaccurate responses generated by ChatGPT, I CHECKED THEM!

Searching for article titles on Google Scholar generated zero results, suggesting that these articles never existed. Was it a clever formation of ChatGPT, the same way it writes creative articles and poetry? To make sure, I reached all journal home pages of the articles cited and visited the stated volumes and issues. Confirming my suspicion, they didn't carry the articles by the stated authors or titles. To further ensure this phenomenon, I asked ChatGPT to generate a text on a specific subject with citations. It did that, too, with much enthusiasm. Again, all the references were false! It even generated Digital Object Identifiers (DOI) that looked real. These also were imaginative. One DOI worked, but that directed to a completely different article.

Conclusion

In conclusion, ChatGPT demonstrates remarkable capabilities in various areas, such as engaging in casual conversations, providing general information, and offering creative suggestions. Its versatility and adaptability make it an invaluable tool for various applications. However, when it comes to scientific writing, ChatGPT executes with some limitations. It may not always provide the most accurate or up-to-date information, and its responses may lack the precision and clarity that is expected in scientific discourse. My recommendation is to warn the users that the citations could be false.

Despite these shortcomings, ChatGPT remains an impressive language model with immense potential. As the field of artificial intelligence continues to advance, it is anticipated that future iterations of ChatGPT will address these limitations (Bloomberg, 2023) and further expand its capabilities, making it an even more robust and reliable tool for users across diverse domains.

References

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