

AI Writing in Academics

As soon as they were released to the public, AI writing programs like ChatGPT became a hot topic—especially in the academic world. Knowing all about how to use AI in writing is important for students and professors alike; AI writing programs are fantastic tools, but it is important to know how to use them without accidentally plagiarizing. Benefits of using AI writing programs include being better able to brainstorm, to overcome writer’s block, and to learn more about writing itself. However, while AI can be an excellent tool, it also presents various challenges.

What is AI?

ChatGPT and AI writing programs are large language models (LLMs). A large language model is an algorithm that is trained on a large amount of data (in this case, written information available on the internet) and then uses what it has gathered to turn it into something new.

Most people refer to ChatGPT to refer to all AI writing programs. However, it is important to note that ChatGPT is the name of a singular program developed by the company OpenAI—it does not refer to AI writing programs as a whole. This is similar to how people say “Google” instead of “search engine.”

Are AI writing programs like search engines?

ChatGPT and other AI writing programs do not search the web for information; they only generate writing using information that they have been trained on—their training includes real information, comment sections, and even conspiracy theories.

AI writing programs are LLMs, not search engines. They do not give you information from a single reliable source—they give you a mash-up of information that they are trained on, both reliable and unreliable. As of 2023, they are unable to sort truth from fiction. When you ask AI writing programs a question, they give you one answer back. You are not able to validate the source or find other webpages. To do so, you need to use a search engine.

What are AI hallucinations?

ChatGPT and other AI writing programs are known to hallucinate. This means that they can sometimes invent examples and get facts wrong—even basic ones. ChatGPT in particular has a problem with inventing sources; if it is asked to write a research paper and cite its sources, it is possible that it will make up websites and journal articles that sound legitimate but are actually bogus. This was a significant problem after ChatGPT’s release, but source-related hallucinations are becoming rarer, and AI writing tools will only become better as time progresses.

There are some documented hallucinations that have been not only false but downright harmful. One such harmful example involved ChatGPT placing a law professor's name on a list of sex offenders even though the law professor had never done anything wrong (Nelson). Thankfully, nothing came of this, but it demonstrates that AI writing programs can invent events and "facts" that are incredibly harmful. Additionally, people cannot ask ChatGPT to issue apologies or take back statements—it is a tool, not a person.

What are ethical concerns of AI?

One significant concern about AI writing programs is intellectual property. The fact that AI writing programs are trained on existing materials means that they use people's writing without permission. Essentially, AI writing programs generate content based on the words they have been trained on, and a lot of those words consist of copyrighted content. Millions of content creators have had their work used without permission, and they get nothing in return.

Another concern about the ethics of AI writing programs is bias. Because these programs are trained from human-created, existing material, the bias from those materials appears in the programs (Waldron). For example, if an AI writing program is trained on material that says that global warming is not real, it will tell people exactly that when asked. And because people see AI writing programs as neutral, the programs' biases will affect people's thinking and bring their writing in line with the bias.

What are acceptable and unacceptable uses of AI in academic writing?

Do's

- Use AI to brainstorm and help you get started. Feed it prompts about topics you want to write about. Its answers may provide you with a jumping off point from which you can develop your own original idea.
- Ask AI questions about your topic. If you have a topic in mind but are stuck with how to proceed, feed the AI prompts related to your existing idea(s). You can keep asking AI follow-up questions as well to glean more information. It can help you generate ideas related to your topic that you can then explore, research, and expand upon.
- Have AI generate sample essays for you. You can then use these essays as examples and guides for how to write your own paper. However, do not use/copy *any* part of these essays! That's plagiarism.
- Use AI to learn about different genres of academic writing. In academic writing, genres are a bit different from genres like mystery, thriller, and action—genres in academic writing are the types of essays that students write, such as personal narratives, argumentative papers, and rhetorical analyses.

Don'ts

- Do not use AI to write your papers—this practice is plagiarism.
 - Plagiarism is defined as not crediting the original author when using ideas that aren't your own. Even if you put the original author's idea in your own words, you still must cite it because it's not your own idea.
 - It is getting harder to get away with cheating by using AI. AI detection tools are getting better—just like AI writing programs—and some programs in late 2023 are achieving detection accuracy rates close to 100%.
- Do not use AI tools if the practice goes against your professor's policies. Whether or not you can use AI will often depend on individual professors' policies: some professors ban it entirely; some will allow it for brainstorming use; and some will give assignments where students use AI and then analyze the essays it generates. Ask your professors about their policies before you use AI in your writing.

What will AI writing look like in the future?

ChatGPT and AI are constantly improving. In the future (or whenever you are reading this), ChatGPT and other LLMs may have ironed out many of their problems; however, no matter how good they may get, it is wise to approach them with caution and use your own critical thinking skills. It is important to know how to use AI software as a tool and not as a crutch.

Activity: Use AI to learn about genres of writing

Pick a genre from the list below. Ask ChatGPT or your preferred AI writing program to write in that genre and skim through what it puts out. Are there distinct features of the genre that you didn't know about? Make a list of them so you can learn more about the genre of writing.

- a. Op-ed
- b. Listicle
- c. Speech
- d. Script
- e. Poem
- f. National Enquirer article

Sample

d: script

- There are character names next to every line of dialogue.
- There are scene descriptions but not much else besides dialogue.
- There is a distinct formatting style, and it is different from all other genres.

References

Nelson, Jason. "ChatGPT Wrongly Accuses Law Professor of Sexual Assault." *Yahoo Finance*, <https://finance.yahoo.com/news/chatgpt-wrongly-accuses-law-professor-184500778.html>. Accessed 12 January 2024.

Waldron, Patricia. "Writing with AI Help Can Shift Your Opinions." *Cornell Chronicle*, <https://news.cornell.edu/stories/2023/05/writing-ai-help-can-shift-your-opinions>. Accessed 12 January 2024.