

ITS Overview – Generative AI Tool Usage, 2023

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The current wave of generative Artificial Intelligence (AI) technologies such as: ChatGPT, DALL-E 2, Bard, Midjourney, Stable Diffusion, MusicLM, et al has rapidly captured the attention, and imagination of higher education and the general public alike. These are novel tools, and instructors, administrators, technologists, and students are all experimenting with their use in various settings including academic settings. This overview highlights some key considerations for using this type of AI at Boston College from ITS's perspective. It does not directly address use of the technology by students for classwork. When using these tools at Boston College, please take all of the material below into consideration.

- Use of these tools must comply with all existing University policies.
- Acquisition of new AI software/services, like any other software, is subject to the “GetTech” process.
<https://www.bc.edu/bc-web/offices/its/services/technology-acquisition.html>
- Faculty considering the use of Generative AI themselves, or possible use by students in their classes, should refer to the Center for Teaching Excellence's page,
<https://cteresources.bc.edu/documentation/artificial-intelligence-in-teaching-and-learning/>

Appropriate Use of Generative AI¹

- **Cite your source(s).** Generative AI, as of this writing, is somewhat notorious at not providing proper citations as to where it borrows information from in constructing answers to questions. If you use generative AI, you should cite either the original sources, if possible, or simply that you used a given generative AI engine on a given date. Similarly, if you use AI to generate images, you should cite this in the image label. This is a traditional practice in academia and should be neither a surprise nor an inconvenience, and it is also ethically appropriate not to claim credit for others' work, aka plagiarism.
- **Inspiration and summarization.** Using Generative AI to draft a document, or to shorten a document from say 3 pages to 1 page, can save significant time. Given that the technology is currently prone to errors and biases, you should carefully review any such material generated by AI “Dangers...” (see below) and consider citing your use of the technology if it contributes substantially to the final product.
- **Research.** Experimenting with this technology as an analytical or research tool, while mindful of the “Dangers...” (see below), is immensely important to the University and to society as a whole as we grapple with a very different technology than what most of us are used to. Please share what you learn, even if informal, with the rest of the community.

¹ Material in this section is reworded for academia from <https://www.wired.com/about/generative-ai-policy/>

Dangers of Artificial Intelligence²

- **Privacy:** Whenever using or interacting with an AI system, such as when chatting online with ChatGPT, or asking an AI system to analyze or summarize data for you, be aware that any information you enter into the system can not only be processed but also retained and used by the AI to give answers to others. This means if you enter any personal information about yourself or any confidential Boston College information, that information will be stored and potentially shared with or sold to others. Do not share or enter any information that you consider sensitive, personal, or is confidential Boston College data or research data.
- **Algorithmic Bias:** UNESCO has warned that “AI is not neutral: AI-based decisions are susceptible to inaccuracies, discriminatory outcomes, embedded or inserted bias.” Users of AI must be cognizant of this.
- **Recreating Voice/Video:** AI solutions can take a recording of a person’s voice – your voice for example – and then use it to create real-time audio that sounds just like you. So, a cyber attacker could create a message that sounds like you, potentially tricking your coworkers into thinking you called and asked them to take an action. AI can also do this with pictures or video. Sometimes called Deep Fakes, an AI solution can take an existing picture or video of you and use it to recreate entirely new pictures or videos (including your voice) appearing to show you doing things that you never did. Because of this, you should be wary of posting extensive voice or video of yourself on the Internet, and also be skeptical of recorded messages of colleagues. Finally, do not mis-use the technology to engage in this type of re-creation yourself.
- **Wrong Answers:** Regarding the data or answers AI provides, the solutions can be wrong. AI often uses public information from the Internet, and its answers may be influenced by the biases of its developers or the data it was “trained” on. While typical search engines are designed to provide you the “best” or most correct answer to your queries, solutions like generative AI may be designed to give you the most human-like answer. Which approach is better depends on what you are attempting to accomplish. People also give wrong answers, of course. But we already know this and know to check peoples’ answers – generative AI answers should also be checked as appropriate.
- **Privacy:** Whenever using or interacting with an AI system, such as when chatting online with ChatGPT, or asking an AI system to analyze or summarize data for you, be aware that any information you enter into the system can not only be processed but also retained and used by the AI to give answers to others. This means if you enter any personal information about yourself or any confidential Boston College information, that information will be stored and potentially shared with or sold to others. Do not share or enter any information that you consider sensitive, personal, or is confidential Boston College data or research data.

² This section is largely adopted, including significant wording, from:
<https://www.sans.org/newsletters/ouch/artificial-intelligence>