DEPARTMENT OF MATHEMATICAL SCIENCES UNITED STATES MILITARY ACADEMY WEST POINT, NEW YORK 10996

MADN-MATH 6 November 2023

MEMORANDUM FOR D/Math Cadets and Faculty

SUBJECT: Guidance on the use of Generative AI in MA498/MA499/MA491/MAx89

1. References.

- a. *Documentation and Acknowledgement of Academic Work* (DAAW), June 2023, Office of the Dean. United States Military Academy. link
- b. Dean's AY24 Generative Al Guidance link
- c. Association of Computing Machinery Policy on Authorship <u>link</u> (extract is provided in Annex A)
- 2. **Purpose.** The purpose of this memorandum is to provide guidance to cadets and faculty engaged in undergraduate research to ensure that we are aligned with Dean's policies on the use of Generative AI. The use of AI tools including Generative AI is generally encouraged. Understanding how these tools can enhance productivity and research progress is important. However, cadets and faculty should seek to use AI tools without short-circuiting the process of learning -- particularly the process of learning to write in a formal, technical style appropriate for upper level undergraduate or early graduate level work.
- 3. **Policy.** Cadets are welcome to utilize Generative AI, but assistance must be documented according to the DAAW. In other words, if you use AI tools in your work, you must cite it. Refined guidance is as follows:

Do Not:

- Upload sensitive, proprietary, CUI or classified data into an AI tool. Think carefully about uploading any data that you did not generate or that is not a publicly available data set.
- Intentionally take any action that would discredit or harm the United States Army, USMA, or the Department of Mathematical Sciences.

Do:

- Writing. Regarding assistance in <u>writing</u> your Interim Report: follow the Association of Computing Machinery <u>quidelines</u> (see Annex A).
- **Coding**. Regarding assistance received in **coding**: fully document and comment your code where you have received assistance from Generative AI in generating or troubleshooting code.
- Other Assistance. Regarding assistance received in <u>other research tasks</u> such as brainstorming, experimental design, literature review, image generation or efficiently using LaTeX: acknowledge assistance IAW with DAAW (using an in-line citation and an Acknowledgement page). Use Appendix A of the DAAW as a guide.
- Communicate openly and often with your advisor about how to use AI <u>ethically</u> and effectively as well as the implications and potential pitfalls of various AI uses.

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- Follow whatever Sharing and Publication Policy the authors of your AI tool have published, such as the OpenAI Policy.
- Follow any data sharing agreements that you have in place.
- If you wish to publish, be sure to understand the limitations and restrictions of your desired publishing venue.

NOTE: it will be difficult to comply with the Dean's policies on Generative AI without keeping good notes and records of where data, insight, code snippets, etc. came from. Be diligent in recording how progress on your research is made and be sure to generate your documentation while you are conducting research activities (brainstorming, coding, writing, data analysis, etc.).

4. The Point of Contact is the undersigned at james.bluman@westpoint.edu and x7685.

JAMES E. BLUMAN COL, AV/FA47

Research Program Director

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Annex A. Extract from the Association of Computing Machinery's Policy on Authorship link

ACM Policy on Authorship

Can I use generative AI software tools to prepare my manuscript?

Yes, the use of such tools is permitted, subject to the following requirements:

- That these systems do not plagiarize, misrepresent, or falsify content in ACM submissions.
- That the resulting Work in its totality is an accurate representation of the authors'
 underlying work and novel intellectual contributions and is not primarily the result
 of the tool's generative capabilities.
- That the authors accept responsibility for the veracity and correctness of all material in their Work, including any computer-generated material.

If I use generative AI software tools, under what conditions must I disclose their use in my Work?

Today's generative AI software tools perform different tasks, and it is reasonable to expect that their use and use cases will expand and become more robust over time. Whether disclosure in your published ACM Work is necessary depends on how you utilize these tools. The following guidelines should be followed when determining whether and to what extent disclosure must be provided in your Work.

- If you are using generative AI software tools such as ChatGPT, Jasper, AI-Writer, Lex, or other similar tools to generate new content such as text, images, tables, code, etc. you must disclose their use in either the acknowledgements section of the Work or elsewhere in the Work prominently. The level of disclosure should be commensurate with the proportion of new text or content generated by these tools.
- If entire sections of a Work, including tables, graphs, images, and other content were generated by one of these tools, you should disclose which sections and which tools and tool versions you used to generate those sections by preparing an Appendix or a Supplementary Material document that describes the use, including but not limited to the specific tools and versions, the text of the prompts provided as input, and any post-generation editing (such as rephrasing the generated text). Authors should also note that the amount or type of generated text allowable may vary depending on the type of the section or paper affected. For example, using such tools to generate portions of a Related Work section is fundamentally different than generating novel results or interpretations.
- If the amount of text being generated is small (limited to phrases or sentences), then it would be sufficient to add a footnote to the relevant section of the submission utilizing the system(s) and include a general disclaimer in the Acknowledgements section.

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If you are using generative AI software tools to edit and improve the quality of
your existing text in much the same way you would use a typing assistant like
Grammarly to improve spelling, grammar, punctuation, clarity, engagement or to
use a basic word processing system to correct spelling or grammar, it is not
necessary to disclose such usage of these tools in your Work.

Can a generative Al tool be listed as an author?

No, generative AI software tools cannot be listed as authors on ACM Works under any conditions.