CSE Guidance on Machine Learning and Artificial Intelligence Tools

Jill Jackson, Glenn Landis, Patricia K Baskin, Kelly A Hadsell, and Michelle English on behalf of the CSE Editorial Policy Committee

In late 2022, Open AI introduced ChatGPT, an artificial intelligence chatbot that could answer questions quite eloquently. The scholarly community was concerned how this would affect the publishing landscape. Several questions arose, such as can a chatbot be an author on an article? How do we acknowledge artificial intelligence in work? The CSE Editorial Policy Committee and CSE members came together to propose advice for the community. The following are recommendations for journals and the editorial team to consider in this new world.

Machine Learning and Artificial Intelligence (AI) tools (such as ChatGPT or chatbots) should not be listed as authors because a nonhuman cannot be responsible or accountable for the accuracy, integrity, and originality of the work, and these responsibilities are required for authorship as outlined in the section on Authorship in the Recommendations for Promoting Integrity in Scientific Journal Publications[1] and the ICMJE Roles and Responsibilities for Authorship.[2] AI-assisted tools are unable to hold or transfer copyright.

Authors should disclose usage of AI tools and machine learning tools such as ChatGPT, Chatbots, and Large Language Models (LLM). CSE recommends that journals ask authors to attest at initial submission and revision to the usage of AI and describe its use in either a submission question or in the cover letter. Journals should have an explicit policy (preferably included in the Information for Authors) about the use of AI-generated text and images. Journals may want to ask for the technical specifications (name, version, model) of the LLM or AI and the method of the application (query structure, syntax). Ultimately, human authors must be accountable for all aspects of a manuscript, including the accuracy of the content that was created with the assistance of AI, the absence of plagiarism, and for appropriate attributions of such sources.

Tools to detect AI-generated text are becoming available in this evolving field. Until they can be applied widely, journals must rely on the author to properly disclose and detail the use of AI-assisted tools in their work. This section will be updated as new information about detection tools is available.

References and Links

1. https://www.councilscienceeditors.org/recommendations-for-promoting-integrity-in-scientific-journal-publications-
2. https://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html