IEEE CSS GenAI Guidelines

The emergence of **Generative Artificial Intelligence (GenAI)** tools is likely to have a significant impact on how research is conducted and on preparing manuscripts for publication, as well as posters and presentations. GenAI tools include Large Language Models (LLMs) (e.g., Open AI’s ChatGPT, Google’s Bard, and Anthropic’s Claude), tools that can produce images and visual art (e.g.,Open AI’s DALL-E2, Midjourney, Stable Diffusion), and other tools that can produce music, video, and synthetic data (e.g., Soundraw, Pictory, Synthesys, Mostly AI).

The IEEE Control Systems Society (CSS) is adopting a set of guidelines on the use of GenAI tools in its publication venues, including CSS journals and conferences. As GenAI tools evolve rapidly and IEEE has yet to adopt related guidelines, the CSS guidelines will be revisited to be consistent with IEEE policies and the moving GenAI landscape.

* **GenAI use by reviewers and editors:** To maintain the confidentiality of the review process, because GenAI tools might store and use input submitted to augment the data sets they use for training purposes, reviewers and editors *shall not upload into a GenAI tool a*ny part of a paper they are evaluating. For the same reason, reviewers and editors *shall not upload into a GenAI tool any part of their report that contains identifying information* about the paper or the authors. Reviewers and editors may use GenAI to improve the exposition of their report, but they are ultimately responsible for their final report and any statements it contains.
* **GenAI use by authors**:The use of GenAI tools should be governed by three important principles: *ownership*, *transparency*, and *disclosure*. Authors may use GenAI in conducting the research (e.g., for literature review) but *should take full responsibility* for any output and its use, particularly because GenAI tools are known to “hallucinate” and generate false statements. In addition, authors should make sure that the *reproducibility of the research* is maintained (e.g., when GenAI is used to generate synthetic data) by saving their data and making them available with their paper. *GenAI tools* *should not be listed as authors or co-authors* since authorship implies ownership and responsibility for the work. Any manuscript that uses GenAI to conduct the research or for composing and editing text shall be *transparent* on how such tools have been used. It is at the discretion of Editorial Boards to determine if the use of GenAI is appropriate and if the authors have made a significant enough contribution to warrant publication. Using GenAI to facilitate *paraphrasing* of published work without proper attribution clearly constitutes plagiarism and will be handled as such. *Transparency* implies that the manuscript should include a detailed description of how GenAI has been used and for exactly which tasks and specific parts of the text. Similarly, if images, artwork, or synthetic data by GenAI tools have been used, the manuscript should provide details on the exact use and process. Finally, authors should *disclose* the use of GenAI tools by citing these tools in the reference section. Similarly, when generating posters and conference presentations, the use of GenAI tools should be *disclosed* and proper references given.

Example author statements:

* The X chatbox [REF] has been used to improve the syntax and grammar of several paragraphs in the manuscript.
* The X chatbox [REF] has been used to identify references related to [topic].
* The X generative AI tool has been used to generate the illustration appearing in Figure Y.