

Editorial



The implementation of Artificial Intelligence (AI) in academic engineering education has provided is enhancing innovative capacities and effectiveness of research activities and processes related to literature search and analysis, automated writing, prediction, and even teaching. AI has thus, gained significant momentum in engineering research and education. Still, with all these developments and possibilities comes an urgent issue of AI governance – how can the academic community implement this technology ethically and responsibly in research?

Traditionally, engineering education has been focused on technical skills development, innovations, and solving complex problems. However, with the development of modern research methodologies, ethical responsibility is also becoming an essential component of any research process. AI systems become active participants in the research process by assisting in data analysis and interpretation, literature and writing, manuscript preparation and peer review, and even decision-making, thus, raising new ethical concerns.

To begin, there is an obvious need for establishing ethical norms regarding academic integrity and authorship in regard to the application of AI in scholarly

processes. The use of artificial intelligence tools allows researchers to generate coherent text, summarize literature sources, and organize papers automatically within seconds. Such AI capabilities bring both benefits and threats to scholarly writing.

Authorship in a case of using artificial intelligence systems implies providing a fair and accurate description of the contribution. Nevertheless, failure to disclose the role of AI in research and writing processes may lead to misrepresentations and undermine the overall trust in academic publications.

Bias and fairness in relation to the results generated by AI systems also constitute an essential ethical aspect in engineering research. Most AI systems are created based on specific sets of data which may have historical, cultural, or disciplinary biases, thus, resulting in unethical recommendation and actions. Therefore, researchers need to analyze the nature and scope of used datasets and algorithms before applying AI technologies.

Another area of ethical concerns in using artificial intelligence involves issues of data privacy and informed consent. AI-based educational platforms require a large amount of user-generated data, which raises questions of surveillance and loss of personal freedom and privacy.

Thus, as AI continues to redefine academic and research boundaries, it is pertinent to ensure that innovation does not outpace ethical considerations. Hoping that all authors submitting manuscripts to JEET ensure academic integrity and disclose use of AI in any form.

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