

Guidelines for Using Generative AI in Academic Research at National Yang Ming Chiao Tung University

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Being recognized as one of the top research universities, National Yang Ming Chiao Tung University fosters a culture of forward-thinking research and technology development. We actively encourage teachers and students to engage in innovative research endeavors and utilize auxiliary tools to enhance academic research, thereby improving research efficiency and demonstrating groundbreaking outcomes. To effectively integrate generative AI into various stages of research, researchers at National Yang Ming Chiao Tung University should adhere to the following guiding principles:

1. Emphasize the process of knowledge creation

Researchers should possess a comprehensive understanding of existing knowledge and utilize it as a foundation to explore unknowns and generate novel insights using a creative thinking framework. While generative AI leverages technologies like big data, machine learning, and deep learning to produce relevant content, it cannot currently substitute human creativity, problem-solving capabilities, and critical thinking. Therefore, it is important not to overly rely on or fully endorse the content generated by generative AI.

2. Verify the accuracy of AI-generated content

AI-generated content is produced through a combination of encoding, decoding processes, and probability statistics. It is not the result of in-depth research on original data or logical reasoning. Additionally, generative AI-generated content does not clearly indicate the source of the information. Therefore, researchers should verify and validate the information to ensure its accuracy.

3. Promote transparency in academic research and uphold accountability

Transparency in academic research is of utmost importance. Researchers should ensure that the research process, steps, data sources, and collaborating entities are properly disclosed. When utilizing generative AI as a research tool, it is essential to familiarize oneself with the policies of academic research institutions, funding agencies, journals, and conferences regarding the use of generative AI. When seeking project subsidies and publishing research findings, researchers should appropriately disclose relevant information to adhere to the applicable regulations on academic research disclosure. Moreover, researchers should assume full responsibility for their own research conduct and outcomes. If their academic works include content generated by generative AI, they are required to declare, disclose, and carefully evaluate the implications.

4. Pay attention to the user terms and policies of generative AI developers

Typically, developers of generative AI tools will release user terms and policies, including their Terms of Use, which outline the permissible usage and restrictions on the generated content. Prior to utilizing generative AI tools, it is crucial to thoroughly read and understand the applicable terms and policies to ensure compliance and avoid any breaches of the usage terms.

5. Comply with Copyright Act and the academic ethics–related standards

Generative AI relies on the work of others to generate content. As a result, academic publishers and research institutions have established policies regarding the use of generative AI, which may include requirements for disclosure of usage statements and restrictions on using generative AI tools as authors of scholarly publications. When utilizing such tools, researchers should familiarize themselves with these policies and accurately attribute the source of data in accordance with Copyright Act and academic conventions. This ensures compliance with Copyright Act and the academic ethics–related standards.