PROSPECTS OF GENERATIVE ARTIFICIAL INTELLIGENCE

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Generative artificial intelligence (GenAI) is a special type of artificial intelligence that produces text, images, videos, or other forms of data by using generative models. These models often generate output in response to specific prompts.

Recently GenAI has been widely adopted across many different industries. It is used to simulate private user data for businesses to improve products. By utilizing GenAI to investigate customer spending patterns and identify potential issues, banks, and other financial institutions may learn new things about customer behavior and become aware of potential problems (Mandapuram, 2018, p. 172).

While GenAI has automated many tasks, it has multiple design flaws that will hinder its development prospects. One of the notable limitations is its tendency to produce random responses, especially when confronted with ambiguous prompts. Generative AI models are also limited by the prompt and output size. These issues become apparent when dealing with lengthy texts. As a result, the generated content may lack coherence, leading to incomplete results.

Another major concern when using GenAI is undoubtedly plagiarism of original content. AI journalism has been engaging in extensive plagiarism. This raises the question of whether there should be a threshold for the acceptable amount of AI-generated content, and also whether its frequent use, in the long term, would result in the production of similar paragraphs and structures in papers within the same field (Macdonald, 2023, p. 1).

Nevertheless, while GenAI faces several challenges and ethical concerns,

researchers and developers continue to enhance the technology to overcome its flaws.

So, the continuous improvement guarantees that generative artificial intelligence will play an important role in our digital landscape, ensuring that the prospects of GenAI will remain boundless.

References:

1. Mandapuram, M., Thodupunori, S. R., Bodepudi, A., & Reddy, M. (2018). Investigating the Prospects of Generative Artificial Intelligence. Asian Journal of Humanity Art and Literature, 5(2), 167–174. URL: https://doi.org/10.18034/ajhal.v5i2.659

2. Macdonald, C., Adeloye, D., Sheikh, A., Rudan, I., 2023. Can ChatGPT draft a research article? An example of population-level vaccine effectiveness analysis. J. Glob. Health 13, 01003. URL: https://doi.org/10.7189/jogh.13.01003