

Recommendations of the University of Pardubice on the use of artificial intelligence and chatbots in academic writing

1) Background

Artificial intelligence (AI) tools are becoming generally available and widely used not only in the academia, but in all walks of human life. While the development and spread of AI tools must be perceived as an opportunity to streamline and facilitate human activities, the issues involving ethics and academic integrity must be addressed transparently. The University of Pardubice sees the adoption of AI tools as a positive and inspiring step to enhance the effectiveness of research and development, and supports their use.

These Recommendations are intended for all members of the academic community of the University of Pardubice, including students, teachers and researchers, who wish to use AI tools in academic writing. The Recommendations aim to define instructions and principles governing the use of AI in academic writing while maintaining academic integrity.

2) Definitions

- a) Artificial intelligence (AI): for the purpose of these Recommendations, AI means systems designed to simulate human intelligence and execute tasks normally executed by humans and imitate human abilities for task and problem-solving.
- b) Chatbots are software designed to engage in real-time conversation with human users or other systems. Chatbots rely on advanced algorithms of natural language processing and machine learning and are able to understand human speech and generate natural and contextually relevant answers. By way of example, chatbots include ChatGPT¹, Microsoft Copilot², YouChat³, or Chatsonic⁴.
- c) Data generation tools mean AI-powered software designed to generate different types of data. Such data may include images, sound, signals, or numerical series. Examples for images include DALL-E⁵ or Midjourney⁶, and SOUNDRAW⁷ or Soundful⁸ for music.
- d) Academic writing means the creation of specialized texts used in education or academic environments including, without limitation, writing scholarly essays, theses, or other academic texts. The aim of academic writing is to communicate ideas, concepts and research findings to other researchers, academics and readers.

3) Legal and ethical principles

- a) AI, data generation tools or chatbots do not meet the requirements for authorship of academic texts defined by Act No. 121/2000 Sb, on copyright and rights related to copyright (the Copyright Act), as amended. Such tools cannot be listed as authors or co-authors of any paper published with the affiliation of the University of Pardubice.
- b) When using AI, chatbots or data generation tools, the principles of research integrity must be complied with and the use of any tools must be properly referenced for each portion of the academic text so generated in compliance with the field-specific rules, just like references are

¹ <https://chat.openai.com/>

² <https://www.microsoft.com/en-us/microsoft-copilot>

³ <https://web.youchat.com/>

⁴ <https://writesonic.com/chat>

⁵ <https://openai.com/dall-e-3>

⁶ <https://www.midjourney.com/>

⁷ <https://soundraw.io/>

⁸ <https://soundful.com/>

made to the use of other software, hardware and tools or methods used for conducting experiments, processing and analysing data, or editing texts. Under any circumstances, any output must result from the intellectual activity of the authors reflecting their personality.

- c) AI or chatbots may be used for preliminary search, argument building, text summarization, or enhancing the intelligibility and style of the academic text, rather than for core tasks such as defining the aims, interpreting data or drawing conclusions, unless the rules applicable to academic writing stipulate otherwise.
- d) If a data generation tool is used for research and academic writing, the tool used as well as the data generated, including their format, resolution and other relevant properties, must be described transparently, just like the methods used to evaluate the quality of the data generated.
- e) Authors of academic texts are responsible for the accuracy, integrity and originality of their research outputs, including the impact of the use of AI, chatbots and data generation tools. AI tools may provide inaccurate, misleading or incorrect information that must be always subjected to critical analysis by the author.
- f) Any content generated by AI must be created, spread and communicated strictly in compliance with applicable legislation, as well as policies and instructions of publishers and commissioners, and all anti-plagiarism and data protection principles must be complied with. In some jurisdictions, copyright and intellectual property rights apply to data used to train AI models, chatbots or data generation tools.

4) Raising awareness about AI and chatbots in academic writing

- a) The University of Pardubice organizes regular information sessions to enable open discussion and reflection on the ethical principles behind the use of AI and chatbots in academic writing.
- b) If you need up-to-date information about the use of AI and chatbots in academic writing, please contact Mgr. Veronika Kolínová (e-mail: veronika.kolinova@upce.cz).