## Artificial Intelligence in Higher Education: Bridging the Gap Between Ethical Theory and Practice

Artificial Intelligence (AI) in higher education (HE) has been gaining popularity over the past two decades and its adoption has been accelerating significantly over the past five years (Chen et al., 2022; Crompton & Burke, 2023; Bond et al., 2024). Especially the launch of ChatGPT on November 30<sup>th</sup>, 2022, gave rise to a heated and controversial debate, including in academia and HE (cf. Stokel-Walker & Van Noorden, 2023). The spread of AI in HE poses considerable challenges, the biggest of which being the lack of ethical reflection not only in the design and use of AI but also its broader societal implications (cf. Bond et al., 2024).

While the academic philosophical debate on Ethics of AI is vast and covers a variety of topics and issues, literature in ethics of AI in HE is sparse. What little research exists is typically conducted by non-philosophers. Given the rise in popularity as well as the ethical urgency and severity of the topic, it is safe to say, that more research will be done in the years to come. However, even if academic literature were readily available on the topic, a gap between ethical theory and practice remains. Philosophical papers on ethics of AI are too abstract and provide little to no practical guidance for practitioners (at least that is anecdotally the most common complaint I hear from my colleagues in interdisciplinary projects). On the other hand, research on ethics of AI from non-philosophers (especially in the context of higher education) is heavily under-theorised and under-conceptualised. Ethical terms such as "justice", "fairness", "responsibility" and more, are being brought forth (with good reason!), but remain empty vestiges, rarely, if at all, reflected on in a philosophically salient manner.

A (so far anecdotal and preliminary) characterization of this gap between ethical theory and practice reveals (at least) two issues, which need to be addressed both acutely and systemically. (1) Practitioners (i.e. AI designers, implementers, and users in higher education) lack the ethical skills to reflect on the relevant ethical issues in designing, implementing, and/or using AI technologies in their respective areas. (2) Philosophers in ethics of AI lack the practical know-how in order to provide actionable ethical guidance in concrete contexts. In my dissertation project, I mostly focus on addressing the first issue by developing a framework of feminist technomoral virtue ethics (expanding on the work by Vallor, 2016) which serves as the normative foundation for the development of an ethics course for non-philosophers in the field of AI in higher education. In the first half of this talk, I will unfold the argument for why such a framework and its application is necessary for ethical work in the field of AI in higher education. More specifically, I will highlight why ethical principles and guidelines are not sufficient for practical ethical guidance

and the need to complement them with the cultivation of feminist technomoral virtues. In the second half of the talk, I would like to explore the second issue and what philosophers could do about it. More specifically, I will outline two arguments for the potential responsibilities of philosophers in engaging with ethical work in the context of AI in higher education. The first argument concerns taking interdisciplinarity seriously in terms of having not just a superficial understanding of the AI application at hand but a foundational one. The second argument pleads for the responsibility to "translate" philosophical/ethical findings to make them accessible for practitioners, including practice-oriented ethical guidance.

## References

- Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., Negrea, V., Oxley, E., Pham, P., Chong, S. W., & Siemens, G. (2024). A meta systematic review of artificial intelligence in higher education: A call for increased ethics, collaboration, and rigour. *International Journal of Educational Technology in Higher Education*, 21(1), 4. https://doi.org/10.1186/s41239-023-00436-z
- Chen, X., Zou, D., Xie, H., Cheng, G., & Liu, C. (2022). Two Decades of Artificial Intelligence in Education: Contributors, Collaborations, Research Topics, Challenges, and Future Directions. *Educational Technology & Society*, 25(1), 28–47.
- Crompton, H., & Burke, D. (2023). Artificial intelligence in higher education: The state of the field. *International Journal of Educational Technology in Higher Education*, 20(1), Article 1. <a href="https://doi.org/10.1186/s41239-023-00392-8">https://doi.org/10.1186/s41239-023-00392-8</a>
- Stokel-Walker, C., & Van Noorden, R. (2023). The promise and peril of generative AI. *Nature*, *614*(7947), 214–216. https://doi.org/10.1038/d41586-023-00340-6
- Vallor, S. (2016). *Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting*. Oxford University Press. <a href="https://doi.org/10.1093/acprof:oso/9780190498511.001.0001">https://doi.org/10.1093/acprof:oso/9780190498511.001.0001</a>