e-Portfolio Activity: Reflective Activity 1 – Ethics in Computing in the age of Generative AI

Artificial intelligence is a concept that has fascinated humanity for quite some time. Characters like the Tinman from Allice in Wonderland (Anyoha, 2017), or C3PO from Star Wars have left a mark on a generation that is now striving to create and develop artificial intelligence. After the so-called "AI Winter", which ended in 1993, artificial intelligence has experienced what some may call a "Spring" (Shin, 2019). Before this recent revolution in AI technology, some might have argued that it would mainly impact physical and logical industries and aid with automation (Mesquita et al., 2021), but as has become evident, it is impacting almost every sector and industry in some manner (Ajami & Karimi, 2023). Artists in particular are struggling with the uprising of AI art generators like Dall-E and Midjourney.

Struggles such as those are what opens the discussion on not only the ethical usage of AI, but also the ethics of training AI models on copyrighted data. The "Ethics Boom", as mentioned by Correa et al. (2023) underlines the necessity for AI regulations. Although the concept seems obvious, it is a challenging task to implement such regulations globally. Developing ethics for artificial intelligence requires background knowledge on social, political, and economic contexts for the countries in which the AI is developed (Deckard, 2023), and used. Another issue facing AI developers and researchers is bias. Since artificial intelligence is trained on large amounts of data generated by human beings from various cultural, religious, and political backgrounds, as well as data filled with ideas many of us may consider inappropriate or racist, it is the task of developers and researchers to find the origins of such biases and how to mitigate them (Aquino, 2023).

Another aspect that is often overlooked is that some countries and languages are heavily underrepresented or unsupported, limiting AI access to people living in these countries. It is also no secret that countries such as the United States and China, or collectives such as the European Union will have greater impact and influence on AI regulations than other, smaller countries (Radi, 2023).

Based on these issues, and the fact that the usage of artificial intelligence has global impacts, it is of utmost importance that decisions regarding regulations and usage should be made in a global forum, where every country can voice their concerns and opinions. Whilst every country has its sovereignty and can pass local laws to protect themselves and their citizens, there are impacts which have to be addressed as an international community. For instance, the manipulation of video and audio data, especially on a political level, could lead to international conflicts. As discussed by Jacobeen (2021) in his book on video manipulation and its political impacts, technologies like stable diffusion or the yet-to-be released "Sona" model by OpenAI could cause political instability.

Forums such as the United Nations could provide a platform for the global community to discuss and agree on laws and regulations regarding the usage of AI. Although there is some

consensus on certain aspects such as justice, non-maleficence, and accountability (), there is no doubt that more work in this area is required on a global level.

References

Anyoha, R. (2017) The History of Artificial Intelligence. Available from: https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/ [Accessed 15 March 2024].

Shin, Y. (2019) The Spring of Artificial Intelligence in its Global Winter. *IEEE Annals of the History of Computing* 41(4): 71 - 82. Available from: https://ieeexplore.ieee.org/document/8736780 [Accessed 15 March 2024].

Mesquita, A., Oliveira, L. & Sa Sequeira, A. (2021) *Did AI Kill My Job?: Impacts of the Fourth Industrial Revolution in Administrative Job Positions in Portugal*. Available from: https://www.researchgate.net/publication/344720290_Did_AI_Kill_My_Job_Impacts_of_the_Fourth_Industrial_Revolution_in_Administrative_Job_Positions_in_Portugal [Accessed 15 March 2024].

Ajami, R. A. & Karimi, H. (2023) Artificial Intelligence: Opportunities and Challenges. *Journal of Asia-Pacific Business* 24(2): 73-75. Available from: https://www.tandfonline.com/doi/epdf/10.1080/10599231.2023.2210239?needAccess=true [Accessed 15 March 2024].

Correa, N. et al. (2023) *Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance*. Available from: https://www.sciencedirect.com/science/article/pii/S2666389923002416 [Accessed 15 March 2024].

Deckard, R. (2023) What are ethics in AI? Available from: https://www.bcs.org/articles-opinion-and-research/what-are-ethics-in-ai/ [Accessed 15 March 2024].

Aquino, Y. S. J. (2023) Making decisions: Bias in artificial intelligence and data-driven diagnostic tools. *Australian Journal of General Practice* 52(7): 439-442. Available from: https://www1.racgp.org.au/ajgp/2023/july/making-decisions [Accessed 15 March 2024].

Radi, V. G. (2023) 'Comparative Analysis of the AI Regulation of the EU, US and China from a Privacy Perspective'. *2023 46th MIPRO ICT and Electronics Convention (MIPRO)*. Opatija, Croatia. 22-26 May 2023. IEEE. Available from: https://ieeexplore.ieee.org/document/10159864 [Accessed 15 March 2024].

Jacobeen, S. (2021) *The Potential Impact of Video Manipulation and Fraudulent Simulation Technology on Political Stability*. Springer. DOI: 10.1007/978-3-030-73655-2_2 [Accessed 15 March 2024].