Introduction

I'm going to start with some key definitions before reflecting on the ethical considerations relevant to AI citing the paper on worldwide AI Ethics (Correa et al, 2023), the article on Ethics in AI (Deckard, 2023) and my own independent research on AI Ethics. Then I'll discuss how different countries across the world mitigate the legal, social and ethical concerns relevant to generative AI.

What is meant by ethics?

The Oxford English dictionary define ethics as a set of moral principles that govern a person's behaviour or the conduct of an activity (Oxford English Dictionary, 2014).

What is meant by AI?

IBM define Artificial intelligence (AI) as the technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy (IBM, 2024).

What is meant by Generative AI?

IBM define generative AI as deep-learning models that can generate high-quality text, images, and other content based on the data they were trained on (IBM, 2023).

Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance

In the paper Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance (Correa et al, 2023) Nicholas Correa, Camila Galvao, James Santos and Carolina Carvalho performed an n-gram analysis on 200 documents from 37 different countries in five different languages in an attempt to form a global consensus on the guidelines and recommendations for AI governance. They critiqued the research done on AI ethics to date citing studies by Anna Jobin, Thilo Hagendorff and Jessica Fjeld and proposed not to use popularity-based filtering of documents to gain global view of AI ethics.

They categorised each of the 200 documents based on the content of the document, the type of regulation, the normative strength of the regulation and the impact scope. Then they categorised the ethical principles for AI into the following seventeen categories; accountability/liability, beneficence/non-maleficence, children and adolescent rights, dignity/human rights, diversity/inclusion/pluralism/accessibility, freedom/autonomy/democratic values/technological sovereignty, human formation/education, human-centeredness/alignment, intellectual property, justice/equity/non-discrimination, labour rights, cooperation/fair competition/open source, privacy, reliability/safety/security/trustworthiness, sustainability, transparency/explainability/auditability and truthfulness.

There were some severe limitations to their study however which put the validity of their results into question as the study only focused on documents written in 5 different languages, it excluded academic papers, South American, African and Oceania countries were significantly under represented, it excluded any historical data and the data was not diverse enough to provide significant value as a over half of the data came from governmental institutions and private organisations and the majority of data was normative and focused on recommendations. Due to the majority of data being from Europe and America and the exclusion criteria it's my opinion that the data wasn't complete enough to represent a world-wide view on AI ethics.

What are Ethics in AI

The article written by Richard Deckard on behalf of the British Computer Society (BCS) outlines what it means to become an AI ethicist and the steps you must take (Deckard, 2023).

Deckard defined AI ethics as the principles and values that guide the development and deployment of AI technologies, ensuring that they're designed and used in a way that is fair, transparent, and accountable.

Deckard proposed there are 7 key steps to becoming an AI ethicist; first you must build a strong foundation is ethics and technology, then you must stay informed on AI developments, then you must understand the context of AI ethics, then you must develop strong communication skills, then you must collaborate with other disciplines, then you must participate in public policy discussions then you must develop practical solutions.

While I agree with the points raised by Deckard, I view the BCS article on Ethics in AI only as a good starting point for understanding ethics in AI as it looks at the ethical considerations only at a high level.

Ethical challenges and Solutions of Generative AI: An Interdisciplinary Perspective

The paper on the Ethical challenges and of Generative AI by Mousa Al-Kfairy, Dheya Mustafa, Nir Kshetri, Mazen Insiew and Omar Alfandi theorised the ethical challenges of AI are related to privacy, data protection, copyright infringement, misinformation, biases and societal inequalities, deepfakes, synthetic media, consent, human rights, transparency, fairness, openness, authenticity, accountability, identity theft, environmental impact, overreliance on technology, discrimination, labour displacement, monopolies, responsible usage and integrity.

One of the many examples they used was about academic integrity when a student uses AI to write an assignment. Stating that it is unfair to the other students who actually did the work and that their dependence on AI could result in a lower level of knowledge.

The areas they focused on were authorship and academic integrity, regulatory and legal issues, privacy, trust and biases, misinformation and deepfakes, educational ethics, transparency and accountability, authenticity and attribution and social and economic impact.

IBM Principles for Trust and Transparency

IBM's three principles for trust and transparency are the purpose of AI is to augment human intelligence, data and insights belong to their creator and new technology must be transparent and explainable (IBM, 2018).

The global landscape of AI ethics guidelines

Anna Jobin, Marcello Ienca and Effy Vayena theorised the majority of the ethical principles relevant to AI are related to transparency, justice and fairness, non-maleficence, responsibility and privacy. They also cited beneficence, freedom and autonomy, trust, dignity, sustainability and solidarity as the other ethical principles that should be considered (Jobin et al., 2019).

SAP's Global AI Ethics Guiding Principles and Governance Bodies

SAP's ten ethical principles are; proportionality and do not harm, safety and security, fairness and non-discrimination, sustainability, right to privacy and data protection, human oversight and determination, transparency and explainability, responsibility and accountability, awareness and literacy and multistakeholder and adoptive governance (SAP 2024).

Mitigating the legal, social and ethical issues of generative AI

The social and ethical concerns of AI are mainly related to privacy breaches, algorithmic discrimination, algorithmic opacity, security issues, reliability issues, transparency issues, increased surveillance, environmental cost, legal accountability, sentient AI, misaligned AGI, super-intelligent AI, AI-related existential risks, AI interfering in democratic processes, Autonomous weapons, environmental sustainability, labour displacement and the principle of truthfulness. Whereas the legal concerns centre around data protection, privacy, intellectual property and copyright laws.

Conclusion

Based on the articles and my own independent research I believe the major ethical concerns for AI are related to transparency, accountability, privacy, equality, security, and trust.

Additionally, there are numerous steps that individuals, organisations and governments can take to mitigate the legal, social and ethical issues created generative AI such as continuing their professional development and constantly upskilling to reduce the risk of labour displacement and by watermarking any content created by AI to avoid any copyright infringement.

References

Correa, N. et al. (2023) *Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance*.

Deckard, R. (2023) *What are Ethics in AI.* BSC.

Oxford English Dictionary. (2014) Ethics. Available from: https://www.oed.com/dictionary/ethics_n [Accessed 4th October 2024].

IBM. (2024) What is artificial intelligence (AI)? Available from: https://www.ibm.com/topics/artificial-intelligence [Accessed 3rd October 2024].

IBM. (2023) What is generative AI? Available from: https://research.ibm.com/blog/what-is-generative-AI [Accessed 2nd October 2024].

Al-kfairy, M. et al. (2024) *Ethical Challenges and Solutions of Generative AI: An Interdisciplinary Perspective*.

IBM (2018). IBM's Principles for Trust and Transparency. Available from: https://www.ibm.com/policy/wp-content/uploads/2018/06/IBM_Principles_SHORT.V4.3.pdf [Accessed 4th October 2024].

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. Nature Machine Intelligence. 1. 10.1038/s42256-019-0088-2.

SAP (2024). SAP's Global AI Ethics Guiding Principles and Governance Bodies. Available from: https://www.sap.com/documents/2018/09/940c6047-1c7d-0010-87a3-c30de2ffd8ff.html [Accessed 4th October 2024].