Unit 1

Reflective activity 1

Ethics in computing in the age of generative AI

**Introduction:**

Artificial Intelligence (AI) has evolved significantly since its inception in the 1950s. Initially, it was a concept for replicating human thought processes, marked by the development of early algorithms. However, AI’s progress has not been linear, with periods of optimism ("AI springs") followed by setbacks ("AI winters") (Spector, 2006). The recent rise of Big Data has revived AI, providing vast datasets that enhance learning algorithms (Duan, Edwards & Dwivedi, 2019). AI's potential has sparked debates, with figures like Stephen Hawking warning of its existential risks, while others, like IBM's Ginni Rometty, emphasise the partnership between AI and human intelligence (Borghino, 2014). Today, AI is central to decision-making, ethics, and robotics, raising critical questions about its role in society, especially with its growing autonomy and ethical challenges (Cuthbertson, 2017). The integration of AI in various sectors promises great advancements but also demands careful consideration of its societal impact.

**Insights from Correa and Deckard:**

Correa et al. (2023) examined the growing demand for ethical regulation of AI, highlighting how advancements in this field have led to concerns around privacy, surveillance, discrimination, and environmental costs. The study analysed 200 documents from 37 countries across six continents to uncover the most frequently cited ethical principles in AI. Key principles identified include accountability, privacy, justice, and transparency. The study addressed short-term issues such as privacy and discrimination, as well as long-term risks like AI sentience and labour displacement. However, Correa et al. acknowledged that while they sought to include a diverse range of global perspectives, the research still remained Western-centric, with underrepresentation from African and Asian nations. This highlights the ongoing challenge of ensuring inclusivity in the global discourse on AI ethics.

Deckard’s (2023) article, in contrast, offers guidance on how to become an AI ethicist. Deckard stresses the importance of a strong foundation in both ethics and technology, keeping up to date with developments in AI, understanding cultural contexts, and communicating ethical concepts effectively. His approach advocates for interdisciplinary collaboration and participation in public policy discussions to shape AI regulation. Deckard also emphasises the need for practical solutions, including the creation of implementable ethical guidelines for AI deployment.

**Comparison of AI Regulation in Different Countries:**

Countries differ in their approach to AI regulation, influenced by their unique cultural, economic, and technological landscapes (Jobin et al., 2019). In Western countries, such as the United States and European Union, there has been a growing push for AI regulation, with an emphasis on principles like transparency, accountability, and fairness. The EU has made significant strides with the AI Act, which proposes a risk-based approach to AI regulation, categorising AI applications based on their potential harm to society (European Commission, 2019). In the US, the conversation around AI regulation is more fragmented, with both state and federal governments grappling with how to address the rapid development of AI technologies.

Asian countries, such as China and India, also play critical roles in AI development but have different regulatory approaches. China, for instance, has focused on fostering innovation while simultaneously instituting policies to monitor and control AI to align with national interests. India, which is home to a large AI talent pool, has been slower to implement regulatory frameworks, but discussions around ethical AI are growing, particularly around ensuring that AI systems are fair and inclusive.

In Africa, while AI is still in a developmental phase, the continent has begun exploring AI governance. Countries like Mauritius have developed national AI strategies, but challenges remain in integrating ethical considerations into AI development, especially given the underrepresentation of African voices in global AI ethics discourse. These differences underscore the need for internationally consistent AI regulations, particularly in a rapidly globalizing field (Kiemdi et al., 2022).

**Suitable Courses of Action for AI Ethics Regulation:**

A key issue raised by Correa et al. (2023) and Deckard (2023) is the lack of standardised international guidelines for AI ethics. While various stakeholders have proposed ethical frameworks, there is no global consensus on what should guide AI development. To address this, I propose the following courses of action:

Global Collaboration and Inclusivity:

It is crucial that AI ethics guidelines are developed through collaborative efforts, involving stakeholders from diverse regions, including Africa and Asia, to ensure that the principles are globally applicable. This will help address the current Western bias and ensure that the concerns of marginalized communities are not overlooked.

Standardisation of Ethical Principles:

As Correa et al. (2023) highlight, principles such as accountability, privacy, and justice are frequently mentioned in AI ethical discourse, but the lack of standardization means these principles are often applied inconsistently across different regions and industries. Establishing a set of universally accepted ethical guidelines, supported by legal frameworks, will provide much-needed clarity and coherence in the AI sector.

Long-Term Impact Consideration:

Deckard's emphasis on long-term ethical implications should be incorporated into regulatory frameworks. While short-term concerns like privacy and discrimination are pressing, long-term challenges such as AI's potential to disrupt labour markets or influence democratic processes need to be addressed proactively through anticipatory regulation and public discourse.

Interdisciplinary Collaboration:

AI ethics should not be the sole domain of technologists. It is vital to involve social scientists, philosophers, legal experts, and policymakers to ensure that AI technologies align with societal values. The interdisciplinary approach recommended by Deckard is essential for crafting ethical guidelines that balance technical feasibility with social responsibility.

**Legal, Social, and Professional Implications:**

The legal landscape for AI is evolving, but current regulations largely remain in the form of "soft laws" or guidelines, as noted by Correa et al. (2023). While the demand for stricter regulation is growing, particularly in the wake of high-profile AI-related incidents, it is still unclear how these ethical guidelines will be enforced. Legal systems must move beyond non-binding recommendations and establish enforceable regulations that hold companies accountable for the ethical implications of their AI systems.

AI technologies have the potential to reshape social dynamics, particularly in terms of privacy and equity. For instance, surveillance technologies powered by AI can infringe on individual privacy, while biased algorithms can perpetuate discrimination. The social implications of AI are particularly concerning for vulnerable communities, including racial minorities and low-income populations. AI systems that perpetuate bias can reinforce societal inequalities, leading to further marginalisation.

The professional responsibilities of AI developers and ethicists are significant. As AI technologies become increasingly integrated into daily life, professionals in the AI field must prioritize ethics in their work. This includes ensuring that AI systems are transparent, explainable, and free from harmful biases. Additionally, AI ethics professionals must engage in ongoing education to stay informed about emerging ethical challenges, as the field evolves rapidly.

**Conclusion:**

In conclusion, the need for standardized international ethical guidelines in AI is more urgent than ever. While Correa et al. (2023) and Deckard (2023) highlight the importance of accountability, transparency, and collaboration in AI ethics, significant challenges remain in terms of global inclusivity, legal enforcement, and social impact. By embracing interdisciplinary collaboration, developing globally applicable standards, and considering both short-term and long-term implications, we can better navigate the ethical complexities of AI and ensure its responsible development.

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