Chapter 3 Foundations of AI Ethics

Ankita Manohar Walawalkar

Asia University, Taiwan

Massoud Moslehpour

https://orcid.org/0000-0001-8808-2407 California State University, San Bernardino, USA

Thanaporn Phattanaviroj

Asia University, Taiwan

Suman Kumar

Jawaharlal Nehru University, New Delhi, India

ABSTRACT

The rapid growth in artificial intelligence (AI) has created many opportunities, this further leads to ethical concerns. Everyone claims to be ethical however, there is a notable gap between stating ethical behavior and maintaining high ethical standards. AI ethics is an arena that has arisen as a response to rising concern. AI ethics is a subclass of digital ethics, reporting concerns about the influence of AI related to their growth and deployment. This chapter undertakes a comprehensive exploration of AI ethics, discussing its basic concepts, and historical prescriptive, along with key ethical theories and their roles, while focusing on the responsibilities of stakeholders in AI ethics. It is important to challenge the AI ethics for AI experts and decision-makers. To accomplish this, the chapter analyses AI ethics' previous, existing, and upcoming statuses.

DOI: 10.4018/979-8-3693-3860-5.ch003

Copyright © 2024, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

INTRODUCTION TO AI ETHICS

AI ethics is an evolving issue that discuss concerns about the impact of AI on human beings and societal institutions. It is part of the wider topic of digital ethics, which covers challenges connected to new digital technologies such as AI, big data, and blockchain (Kazim & Koshiyama, 2021; Sætra & Danaher, 2022). AI's imposing performance drives acceptance in various segments, however; it may cause adverse effects on individuals due to its large data dimensions and privacy concerns. AI ethics require active public debate, considering AI's impact on individuals and social factors (Zhou & Chen, 2023).

Despite the rising number of ethical principles for AI, there is still a growing trend of discussion of guiding principles by organizations. This is due to the initial stage of AI ethics, where individuals still lack information on what ethical principles should be followed. Now a days AI is been used by every organization, and they have their own ethical concerns. However, ethical principles often intersect, leading to the debate on whether each organization should advocate for its own set of principles or adhere to a standardized framework (Corrêa et al., 2023, Gupta & Gauray, 2024).

Organizations depend on ethical AI principles and frameworks, including academia-led agendas like, 'The Institute for Ethical AI and Machine Learning', trade union-led schemes like 'UNI Global Union', and business-led initiatives like 'Microsoft's responsible AI guidelines'. In spite of this, creativity admits the potential negative significances of AI applications and also leads to a wider accountable business outline, lining up good governance and customer societal and ecological concerns. For responsible AI strong governance controls are necessary (Eitel-Porter, 2021).

This chapter delves into a brief overview of AI ethics, starting from a historical perspective and drawing today's landscape with ethics in technology. Further extended to the Key Ethical Theories and Principles in AI. However, there are major questions about the role and responsibility for the use of AI by stakeholders that need to be addressed. This chapter provides a comprehensive exploration of these AI Ethics aspects, dissecting the multi-layered nature of ethics in organizations (Gloor et al., 2022).

Concluding with a progressive standpoint, the chapter creates the discussed ideas and suggests future directions in AI Ethics. Its highlights developing trends, such as the integration of AI for ethical business practices in determining standards. This chapter proposes to provide information as well as knowledge and tools for readers to direct and protect the complicated world of AI ethics

31 more pages are available in the full version of this document, which may be purchased using the "Add to Cart"

button on the publisher's webpage: www.igi-

global.com/chapter/foundations-of-ai-ethics/354393

Related Content

Systematic Design of Web Applications with UML

Rolf Hennickerand Nora Koch (2001). Unified Modeling Language: Systems Analysis, Design and Development Issues (pp. 1-20). www.irma-international.org/chapter/systematic-design-web-applications-uml/30568

Voronoi-Based kNN Queries Using K-Means Clustering in MapReduce

Wei Yan (2019). Emerging Technologies and Applications in Data Processing and Management (pp. 220-241).

www.irma-international.org/chapter/voronoi-based-knn-queries-using-k-means-clustering-inmapreduce/230691

Labeling XML Documents

Jiaheng Lu, Liang Xu, Tok Wang Lingand Changqing Li (2010). Advanced Applications and Structures in XML Processing: Label Streams, Semantics Utilization and Data Query Technologies (pp. 125-142).

www.irma-international.org/chapter/labeling-xml-documents/41502

Closing the Gap Between XML and Relational Database Technologies: State-of-the-Practice, State-of-the-Art and Future Directions

Mary Ann Malloyand Irena Mlynkova (2009). Open and Novel Issues in XML Database Applications: Future Directions and Advanced Technologies (pp. 1-27). www.irma-international.org/chapter/closing-gap-between-xml-relational/27774

XML-Based Analysis of UML Models for Critical Systems Development

Jan Jurjensand Pasha Shabalin (2005). Advances in UML and XML-Based Software Evolution (pp. 257-274).

www.irma-international.org/chapter/xml-based-analysis-uml-models/4938