

Accounting, Finance, Sustainability, Governance & Fraud:  
Theory and Application

Muharrem Kılıç  
Sezer Bozkuş Kahyaoğlu *Editors*

# Algorithmic Discrimination and Ethical Perspective of Artificial Intelligence

 Springer

# **Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application**

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Muharrem Kılıç · Sezer Bozkuş Kahyaoğlu  
Editors

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# Acknowledgements

## Algorithmic Discrimination and the Prohibition of Discrimination in the Age of Artificial Intelligence

Today's humanity is living in a new digital age where the globalization of digital technologies such as "artificial intelligence, internet of things, and robotics". Artificial intelligence (AI), which is thought to have emerged in the middle of the twentieth century at the same time as the historical past of modern computer technology, shows the reach of the new technical move of the age of intensive mechanization opened by the Industrial Revolution. Today, national governments, companies, researchers, and citizens live in a new "data world" where data is getting "bigger, faster and more detailed" than ever before. The AI-based "digital world order" which continues to develop speedily with technological advances, points to a great transformation from the business sector to the health sector, and educational services to the judicial sector. As a result of the development of AI as a creation of digital age technology, today humanity exists in an "*algorithmic society*" that imperviously surrounds individual, social life, and public space with all sectors. This modern algorithmic order we are in has transformative effects.

"Technological fetishism"; today, it is seen to take new forms such as "digital positivism", "big data fetishism", or "post-humanist ideology". In today's world where technological fetishism prevails, there are serious concerns about the protection of fundamental rights and freedoms and the balance of freedom and security. As a matter of fact, AI is directly linked to "health and safety, freedom, privacy, dignity, autonomy and non-discrimination", and these also include ethical concerns. Perhaps the most important risk of using AI systems in algorithmic decision-making is the potential to produce "biased" results.

All these developments make fundamental rights and freedoms more fragile in terms of human rights politics. In parallel with this situation, the significance of protecting fundamental rights and freedoms is increasing. For these reasons, it is significant that national human rights institutions carry out studies on AI and human

rights. Although a number of different justice criteria have been developed in “algorithmic fairness” research in the last few years, concerns about AI technology are increasing. In this context, the issue of preventing discrimination arising from the use of AI has become a major research topic on the agenda of international human rights associations besides human rights institutions and other relevant institutions operating at the national and regional levels.

Hence, the main discussion on the use of AI-based applications focuses on the fact that these applications lead to algorithmic bias and discrimination. Within the context of the Human Rights and Equality Law No. 6701, 15 grounds of discrimination are listed, particularly the grounds of “gender, race, ethnicity, disability and wealth”. It is seen that AI-based applications sometimes lead to discrimination based on gender; sometimes, based on race, religion, wealth, and health status. As an equality institution, it is crucial for national human rights institutions to combat algorithmic discrimination and develop strategies for it.

For this purpose, in cooperation with the Human Rights and Equality Institution of Türkiye (HREIT) and Hasan Kalyoncu University, the “International Symposium on the Effects of Artificial Intelligence in the Context of the Prohibition of Discrimination” was held on March 30, 2022, in Gaziantep. The symposium aims to raise awareness of human rights violations that the use of AI may cause within the scope of the prohibition of discrimination and understand the role of equality bodies in combating these violations.

This study, which is the output of this symposium, aims to draw attention to “bias and discrimination” in the use of artificial intelligence and deals with the subject in 13 chapters. I hope that the book *Algorithmic Discrimination and the Prohibition of Discrimination in the Age of Artificial Intelligence* covers AI technologies in a sophisticated and comprehensive way, from data protection to algorithmic discrimination, the use of AI in criminal proceedings to hate speech, predictive policing to meta-surveillance, will be useful. I would like to congratulate Dr. Kahyaoğlu and all contributing authors for their work and hope that the book will provide a much better understanding of algorithmic discrimination and its effects.

Prof. Muharrem Kiliç  
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and Equality Institution of Türkiye,  
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