

AI Governance in the Context of the EU AI Act (Extended Abstract)

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Abstract

The rapid advancement of artificial intelligence (AI) has brought about significant societal changes, necessitating robust AI governance frameworks. This study analyzed the research trends in AI governance within the framework of the European Union Artificial Intelligence Act (EU AI Act). This study conducted a bibliometric analysis to examine the publications indexed in the Web of Science database. Our findings reveal that research on AI governance, particularly concerning AI systems regulated by the EU AI Act, remains relatively limited compared to the broader AI research landscape. Nonetheless, a growing interdisciplinary interest in AI governance is evident, with notable contributions from multi-disciplinary journals and open-access publications. Analysis of publications per country revealed that while the United States and China dominate AI governance research, European countries, along with the United Kingdom, also contribute significantly with a focus on specific systems restricted by the Act. Dominant research themes include ethical considerations, privacy concerns, and the growing impact of generative AI, such as ChatGPT. Notably, education, healthcare, and worker management are prominent application domains. Keyword network analysis highlights education, ethics, and ChatGPT as central keywords, underscoring the importance of these areas in current AI governance research. Subsequently, a comprehensive literature review was undertaken based on the bibliometric analysis findings to identify research trends, challenges, and insights within the categories of the EU AI Act. This review revealed critical gaps in research concerning regulated AI systems, highlighting the need for more focused research aligned with the Act's regulatory framework. The findings provide valuable insights for researchers and policymakers, informing future research directions and contributing to developing comprehensive AI governance frameworks beyond the EU AI Act. Crucially, the study identifies a significant lag between AI technological advancement and the development of policy and regulation, especially concerning specific AI systems categorized as high-risk by the EU AI Act.

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