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Trustworthy Artificial Intelligence in Industry and Society



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Published, marketed, and distributed by:

Deep Science Publishing https://deepscienceresearch.com/ editor@deepscienceresearch.com WhatsApp: +91 7977171947

ISBN: 978-81-981367-6-3

E-ISBN: 978-81-981367-4-9

https://doi.org/10.70593/978-81-981367-4-9

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Citation: Patil, D., Rane, N. L., Desai, P., & Rane, J. (Eds.). (2024). *Trustworthy Artificial Intelligence in Industry and Society*. Deep Science Publishing. https://doi.org/10.70593/978-81-981367-4-9

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Preface

Artificial Intelligence (AI) is evolving at an unprecedented rate, changing industries and reshaping social landscapes. However, the question still stands: how can we make sure that, even with this growth, AI stays ethical and trustworthy? In an effort to investigate this issue, the book Trustworthy Artificial Intelligence in Industry and Society provides a thorough analysis of AI's potential to promote resilience, accountability, and trust in a variety of contexts. Chapter 1 explores the essential need for transparent and interpretable AI systems, starting with the foundation of Explainable Artificial Intelligence (XAI) and laying the framework for fostering trust among users, stakeholders, and society at large. In Chapter 2, deep learning and machine learning are explored, along with their applications, methods, and implementation challenges. In Chapter 3, the book delves into the impact of artificial intelligence (AI) on Environmental, Social, and Governance (ESG) initiatives. It specifically highlights the applications of AI in the financial services and investment sectors. We look at the adoption and application of AI in the construction sector in Chapter 4, offering some insight into the drivers, patterns, and obstacles that will shape the technology's future. The use of AI to improve supply chain sustainability and revolutionize the transportation industry is covered in Chapters 5 and 6, with a focus on generative AI technologies and ethical issues. Chapter 7 explores how artificial intelligence is affecting customer relationship management, highlighting how sentiment analysis is transforming customer loyalty and experience. This book seeks to shed light on the opportunities and difficulties that artificial intelligence (AI) brings to business and society by exploring these areas.

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Contents

1	Explainable Artificial Intelligence (XAI) as a foundation for trustworthy artificial intelligence
2	Machine learning and deep learning: Methods, techniques, applications, challenges, and future research opportunities
3	Artificial Intelligence and business intelligence to enhance Environmental, Social, and Governance (ESG) strategies: Internet of things, machine learning, and big data analytics in financial services and investment sectors
4	Acceptance and integration of Artificial intelligence and machine learning in the construction industry: Factors, current trends, and challenges
5	Artificial intelligence, machine learning, and deep learning for sustainable and resilient supply chain and logistics management
6	Artificial intelligence and generative AI, such as ChatGPT, in transportation: Applications, technologies, challenges, and ethical considerations
7	Using artificial intelligence, machine learning, and deep learning for sentiment analysis in customer relationship management to improve customer experience, loyalty, and satisfaction