Innovations in Optimization and Machine Learning

Part of the Advances in Computational Intelligence and Robotics Book Series

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Innovations in Optimization and Machine Learning

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AI

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Description:

In today's rapidly evolving world, businesses are confronted with the complex task of streamlining their operations, utilizing machine learning to their advantage, and maneuvering through the intricacies of artificial intelligence. It has become increasingly essential to allocate resources effectively, make informed decisions based on data, and capitalize on AI technologies. However, many organizations require assistance in understanding these disciplines' theoretical principles, practical implementations, and ethical implications.

Innovations in Optimization and Machine Learning serve as a comprehensive solution, offering a deep dive into optimization, machine learning, and AI. By unraveling the complexities and providing practical insights, it empowers researchers, practitioners, students, and enthusiasts to understand and contribute to advancing these fields. The book covers many topics, from evolutionary algorithms to ethical AI development, ensuring a thorough understanding of key concepts and their real-world implications.

By bridging the gap between theory and practice, this book equips readers with the knowledge and tools to address optimization, machine learning, and AI challenges. Whether you're looking to enhance operational efficiency, develop innovative solutions, or drive meaningful change, this book is your guide to unlocking the transformative potential of optimization, machine learning, and AI in today's dynamic landscape.
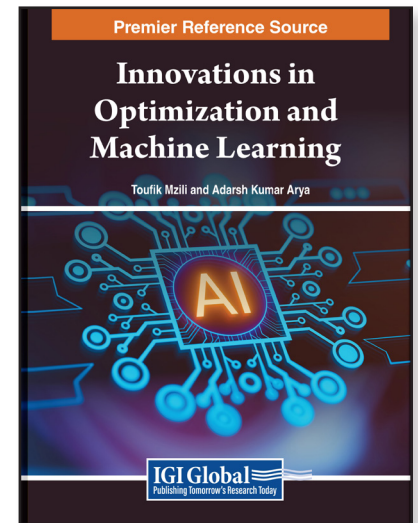
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Hardcover: $365.00   **E-Book:** $365.00   **Hardcover + E-Book:** $440.00

Topics Covered:

- Bayesian Optimization
- Bias and Fairness in Machine Learning Algorithms
- Computer Vision and Image Processing
- Convex Optimization
- Deep Learning Architectures
- Ethical Considerations in AI Development
- Evolutionary Algorithms
- Financial Optimization Models
- Healthcare Optimization
- Human-AI Collaboration and Augmentation
- Metaheuristic Optimization Methods
- Natural Language Processing
- Neural Network Optimization Techniques
- Reinforcement Learning
- Wastewater Treatment Plants Optimization

Subject: Computer Science & Information Technology

Classification: Edited Reference

Readership Level: Advanced-Academic Level (Research Recommended)

Research Suitable for: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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