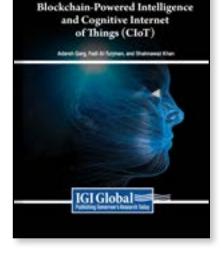# Innovations in Blockchain-Powered Intelligence and Cognitive Internet of Things (CIoT)

Part of the Advances in Computational Intelligence and Robotics Book Series

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## Description:

Embark on a transformative journey into the intricate realm of Cognitive Internet of Things (CIoT) with the groundbreaking **Innovations in Blockchain-Powered Intelligence and Cognitive Internet of Things (CIoT)**. As CIoT emerges as a technological force, seamlessly marrying the Internet of Things (IoT) with cognitive computing techniques, it unveils a world of possibilities and challenges. While CIoT propels industries towards greater intelligence with applications like smart traffic detection and automatic drone surveillance, it harbors concealed threats, particularly vulnerabilities in data integrity. Malicious data can compromise Machine Learning (ML) models, leading to catastrophic consequences for real-time applications. This book stands as a pioneering solution, meticulously delving into the intersection of CIoT, blockchain, and AI-enabled data analytics to fortify the security of CIoT systems.

The primary objective of **Innovations in Blockchain-Powered Intelligence and Cognitive Internet of Things (CIoT)**, is to arm researchers and practitioners with insights into developing AI-enabled cognitive IoT, safeguarded against malicious attacks through the ingenious application of blockchain technology. By tackling the challenges and emerging issues surrounding CIoT-based solutions, this book offers a comprehensive guide to optimizing security, scalability, and sustainability in various industry sectors. Whether you're an academician, researcher, or professional navigating the dynamic landscape of AI/ML and blockchain, this book serves as a beacon for those seeking innovative solutions to fortify CIoT against evolving threats and challenges.

Designed for scholars and industry professionals alike, this book resonates with the pulse of the latest discussions in engineering and business schools. It addresses the current trends, best practices, and emerging challenges in CIoT, making it an invaluable resource for courses in AI/ML and Blockchain. As we witness the rapid integration of CIoT into diverse sectors, this handbook not only unravels the intricacies but also propels the discourse forward, presenting a roadmap for a more secure and intelligent future in the age of Cognitive Internet of Things.

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## Topics Covered:

- Addressing Network Threats in CIoT Data Analytics
- Blockchain in CIoT Security
- Blockchain with Machine Learning
- CIoT Metrics
- CIoT Models
- Cross-Disciplinary CIoT
- Experimental Analytics
- Healthcare Applications
- Securing Cognitive IoT
- Smart Home Applications
- Threats to CIoT Apps

**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