Blockchain and IoT Approaches for Secure Electronic Health Records (EHR)

Part of the Advances in Healthcare Information Systems and Administration Book Series

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Description:

In the realm of healthcare, the persistent challenges of data breaches, centralized systems, and fraudulent claims have posed significant hurdles in ensuring the integrity and security of patient information. The traditional approaches to managing Electronic Health Records (EHR) often fall short, leaving room for exploitation and compromising the confidentiality of sensitive medical data.



Enter the transformative solution presented in **Blockchain and IoT Approaches for Secure Electronic Health Records (EHR)**. This groundbreaking book navigates the intricate landscape of healthcare technology, addressing the vulnerabilities in the current systems. By leveraging the power of Blockchain technology, it pioneers a secure peer-to-peer communication system that not only ensures the tamper-proof nature of health records but also revolutionizes the entire healthcare industry. The book is a comprehensive exploration of Blockchain's relevance in healthcare, covering the architecture, scope, and applications that promise to redefine how patient data is managed and protected.

Tailored for a diverse audience, including students, software engineers, researchers, and industry professionals, this book serves as a vital resource for understanding the intersection of Blockchain and healthcare. From comparative analyses and challenges to detailed architectures and real-world applications, the book engages readers in a journey through the evolving landscape of healthcare technology. Through its recommended topics, it covers issues like data integrity, payment challenges, security fundamentals, and the integration of Blockchain with IoT to create a secure and efficient healthcare digital system. Blockchain and IoT Approaches for Secure Electronic Health Records (EHR) stands as an indispensable guide for anyone seeking transformative insights into the future of healthcare technology.

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Hardcover: \$395.00 E-Book: 395.00 Hardcover + E-Book: \$475.00

Topics Covered:

- Blockchain Application Architecture in Health
- Blockchain in Healthcare: Overcoming Challenges
- Centralized vs Decentralized Health Records
- Challenges in Third-Party Payments (Insurance)
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- Combatting Drug Counterfeiting with Blockchain
- Credentialing Healthcare Professionals
- Decentralized Application Architecture
- Distributed Ledger for Data Privacy

- Ensuring Data Integrity in Healthcare
- Health Record System with Blockchain
- Introduction to Blockchain in Health
- Security Fundamentals in Healthcare
- Securing Patient Data and Payments
- Smart Contracts for Health Records
- Traditional vs Blockchain-Based Healthcare Systems

Subject: Medicine & Healthcare

Readership Level: Advanced-Academic Level

(Research Recommended)

Classification: Edited Reference

Research Suitable for: Advanced Undergraduate

Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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