

Intelligent Cybersecurity and Resilience for Critical Industries: Challenges and Applications

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Intelligent Cybersecurity and Resilience for Critical Industries: Challenges and Applications thoroughly explores cybersecurity principles, strategies, and technologies crucial for protecting digital assets and combating evolving cyber threats in critical industries. This book provides indispensable guidance in fortifying cyber defenses for critical infrastructures. Each chapter offers invaluable insights into proactive defense measures, from AI-driven threat management in healthcare systems to practical applications of AI for cyber risk management in critical infrastructures. Unraveling the complexities of contemporary cyber threats, this book empowers readers with the knowledge and tools needed to navigate the intricate landscape of cybersecurity effectively. Through a multidisciplinary approach spanning AI, machine learning, and advanced technologies, it addresses the urgent challenges organizations encounter in securing their digital infrastructure and safeguarding sensitive data from malicious cyber-attacks.

Technical topics discussed in the book include:

- AI-driven strategies for advanced malware detection and prevention
- Hybrid deep learning techniques for precise malware classification
- Machine learning applications tailored to IoT security challenges
- Comprehensive exploration of blockchain techniques enhancing IoT security and privacy
- Practical integration of security analysis modules for proactive threat intelligence.

Designed as an essential reference, this book caters to students, researchers, cybersecurity professionals, and individuals keen on comprehending and tackling contemporary cyber defense and risk assessment challenges. It serves as a valuable resource for enhancing cybersecurity awareness, knowledge, and practical skills in critical industries.

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