

Improving Threat Detection, Network Security, and Incident Response With AI

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Description:

Artificial intelligence (AI) strengthens cybersecurity by enhancing threat detection, fortifying network security, and streamlining incident response. Traditional security systems often struggle to manage modern cyber threats. AI addresses this challenge by analyzing data in real-time, identifying patterns and anomalies that may indicate malicious activity. Machine learning algorithms detect attacks and threats faster than humans, allowing organizations to respond proactively. In network security, AI helps in monitoring traffic, predicting vulnerabilities, and automatically implementing protective measures. AI-driven incident response tools assess the breaches, contain threats, and initiate recovery protocols. As cyber threats evolve, integrating AI into security infrastructure is essential for maintaining resilience in the digital age.

Improving Threat Detection, Network Security, and Incident Response With AI explores the role of AI in cybersecurity, focusing on its applications in threat detection, malware analysis, network security, and incident response. It examines key AI techniques such as machine learning, deep learning, and natural language processing (NLP) that are transforming cybersecurity operations. This book covers topics such as robotics, software engineering, and behavioral analysis, and is a useful resource for computer engineers, security professionals, academicians, researchers, and data scientists.

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Topics Covered:

- Artificial intelligence (AI)
- Behavioral Analysis
- Cybersecurity
- Deep Learning
- Incident Response
- Machine Learning
- Malware Analysis
- Natural Language Processing
- Network Security
- Robotics
- Software Engineering
- Threat Detection

Subject: Security and Forensics

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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