



## Navigating AI Challenges in Cybersecurity: Strategies for Industrial and IoT Protection

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### Message from the Guest Editors

Dear Colleagues,

This Special Issue tackles pressing challenges in cybersecurity, with a specific focus on protecting industrial control systems and Internet of Things (IoT) devices in the rapidly evolving domain of machine learning and AI applications. A pivotal concern is the resilience of AI-driven systems to the complexities of Adversarial Machine Learning (AML) and the phenomenon of concept drift. While these factors are not direct cyber-attacks, they significantly undermine the effectiveness and dependability of AI models used in cybersecurity. This can lead to severe cybersecurity repercussions, as vulnerabilities in AI can be exploited to compromise the security and integrity of critical systems. Understanding and mitigating these AI-related issues is crucial for maintaining robust cybersecurity defenses in our increasingly interconnected and AI-dependent world.





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## Message from the Editor-in-Chief

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