

Special Issue

Latest Advancements in Machine Learning Applications for Cybersecurity

Message from the Guest Editors

The increasing complexity of cyberattacks necessitates advanced, robust, and reliable security mechanisms. Machine learning (ML) has emerged as a powerful tool in the modern cybersecurity arena, enabling various network devices to operate more efficiently and reliably.

This Special Issue aims to explore the latest advancements in ML applications for cybersecurity, emphasizing both theoretical and practical implementations. The scope of this Special Issue includes, but is not limited to, the following topics.

- ML-based intrusion detection/prevention;
- Impact of adversarial machine learning (AML) in cybersecurity;
- Anomaly and malware detection;
- Applications of ML in Internet of Things (IoT) security;
- Role of high-quality datasets in ML-based cybersecurity.

We invite high-quality submissions including original research articles, survey papers, and studies that present innovative approaches, evaluations, and real-world applications of ML in cybersecurity. Papers that discuss challenges, pave the way for new research avenues, and propose methodologies to improve the trustworthiness of existing ML-based cybersecurity solutions are also encouraged.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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