

Special Issue

Applications of Artificial Intelligence and Machine Learning in Cyber Security

Message from the Guest Editors

Over the last decade, the emergence of artificial intelligence (AI) and machine learning (ML) has seen tremendous advancements and evolution in various spheres of life. However, the widespread usage of these technologies in everyday applications has created new types of cybersecurity threats, such as backdoor attacks, deep fakes, and adversarial attacks. Nevertheless, on the other hand, contemporary algorithms such as deep learning, continuous learning, and generative adversarial networks (GAN) have been effectively used to tackle various security tasks. As a result, it is vital to apply these innovative methods to life-critical missions and evaluate the efficacy of these less-traditional algorithms in cybersecurity sectors.

- Secure artificial intelligence;
- Private machine learning;
- Adversarial machine learning;
- Adversarial attack;
- Deep fakes;
- Anomaly detection;
- Malware detection;
- Differential privacy;
- Imbalanced datasets;
- Security in cloud services;
- Security in RFID;
- Smart systems in cyber security;
- Security in wireless sensor networks

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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