

Special Issue

Advances in Internet of Things (IoT) Security: Challenges and Applications

Message from the Guest Editor

Dear Colleagues, This Special Issue, titled "Advances in Internet of Things (IoT) Security: Challenges and Applications", will explore the latest developments in securing IoT ecosystems. It addresses the critical challenges posed by the proliferation of connected devices and presents innovative solutions across various domains. The Special Issue will cover theoretical advancements, practical implementations, and emerging trends in IoT security, providing a comprehensive overview of the current state of the field and future research directions.

- Lightweight Cryptography for Resource-Constrained IoT Devices;
- Privacy-Preserving Techniques in IoT Data Collection and Processing;
- Secure Communication Protocols for IoT Networks;
- Blockchain-based Security Solutions for IoT;
- Machine Learning and AI for IoT Threat Detection and Prevention;
- IoT Device Authentication and Access Control Mechanisms;
- Security Challenges in Industrial IoT (IIoT) Environments;
- Privacy and Security in Smart Home Systems;
- Secure Firmware Updates and Patch Management for IoT Devices;
- IoT Security Standardization and Regulatory Compliance.

Guest Editor

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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.

Editor-in-Chief

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