

Special Issue

Challenges and Advances of Cybersecurity in Cloud-Sensor Digital Infrastructure

Message from the Guest Editors

The rapid integration of cloud computing and sensor technologies is transforming digital infrastructure across sectors such as healthcare, power grid, transportation, agriculture, manufacturing, and smart cities. This convergence has enabled scalable, real-time, and intelligent systems driven by vast volumes of data collected from heterogeneous sensor networks and processed via powerful cloud platforms. However, this evolution also introduces complex cybersecurity challenges. This Special Issue of *Sensors* invites high-quality contributions that explore emerging security challenges, cutting-edge defense mechanisms, and novel architectures for securing cloud-sensor infrastructures. Topics of interest include, but are not limited to, secure communication protocols, intrusion detection systems, threat modeling, trusted data aggregation, federated learning security, and blockchain-based solutions for distributed sensing environments. We welcome research articles, surveys, and case studies that address both theoretical foundations and practical implementations, particularly those with interdisciplinary insights or industrial relevance.

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

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