

Special Issue

Sensor-Based IoT Systems: Edge Intelligence, Trust Management, and Applications

Message from the Guest Editors

In recent years, the convergence of pervasive sensing, advanced analytics at the network edge, and robust trust frameworks has fundamentally transformed how Internet of Things (IoT) deployments are designed, managed, and scaled. In this Special Issue, we seek to curate a collection of original research articles, comprehensive surveys, and insightful case studies that address the latest advances across the following three core pillars.

- Edge Intelligence;
- Trust Management;
- Applications;

We aim to provide an interdisciplinary forum that fosters dialogue between the fields of IoT, machine learning, and cybersecurity. This Special Issue not only surveys the state of the art but also addresses emerging challenges and opportunities in sensor-based IoT systems. Potential Topics:

- Federated and Collaborative Learning at the Edge
- TinyML and Ultra-Low-Power Deep Learning Inference
- Multi-Access Edge Computing (MEC) Architectures for IoT, etc

We welcome both theoretical advances and practical case studies that push the boundaries of sensor-based IoT. Thank you for considering this Special Issue, and we look forward to your high-quality submissions.

Guest Editors

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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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