



# ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

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## Special Session on

## Securing the Industrial Internet of Things (IIoT) in the Era of Industry 4.0

### Organized and co-chaired by:

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### Call for Papers

#### Technical Outline of the Session and Topics:

In recent years, the proliferation of Industrial Internet of Things (IIoT) devices has revolutionized industrial operations, providing unparalleled levels of connectivity and automation. However, this increased connectivity also brings significant cybersecurity challenges that must be addressed to ensure the reliability, safety, and resilience of industrial systems. The cybersecurity of IIoT is paramount as these systems underpin critical infrastructure such as manufacturing plants, energy facilities, transportation systems, and healthcare facilities. Securing IIoT environments necessitates comprehensive strategies encompassing threat detection, risk mitigation, secure device deployment, data protection, and compliance with industry regulations and standards. Furthermore, with the advent of Industry 4.0, which emphasizes the integration of cyber-physical systems, the significance of cybersecurity in IIoT has grown even more pronounced. This special session aims to showcase the latest advancements and innovative research in the cybersecurity of Industrial Internet of Things, addressing the unique challenges and opportunities in securing interconnected industrial environments.

#### Topics of the Session include, but are not limited to:

- Threat landscape analysis and risk assessment in IIoT environments.
- Secure design and deployment of IIoT devices and systems.
- Intrusion detection and prevention techniques for IIoT networks.
- Cryptographic protocols and techniques for securing IIoT communications.
- Authentication and access control mechanisms for IIoT devices and users.
- Secure firmware and software update mechanisms for IIoT devices.
- Privacy-preserving techniques for IIoT data collection and processing.
- Compliance with industry regulations and standards (e.g., NIST, IEC, ISO) in IIoT cybersecurity.
- Resilience and recovery strategies for IIoT systems in the event of cyberattacks.
- Integration of artificial intelligence and machine learning for enhancing IIoT security.
- Case studies and real-world implementations showcasing successful IIoT cybersecurity practices.

#### Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024

Early submission is highly encouraged for early decision notifications!



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All the instructions for paper submission are included in the conference website:

[www.iecon-2024.org](http://www.iecon-2024.org)