



ICCDM-2026
**International Conference on Cybersecurity, Data Science, and
Machine Learning**

ORGANISED BY: University of Putra Malaysia, Selangor, Kuala Lumpur, Malaysia
On
24th -25th April 2026.

******* CALL FOR PAPERS *******

SPECIAL SESSION ON

Secure Intelligent Perception Systems for IoT, Edge, and Wireless Sensor Networks

SESSION ORGANIZERS:

Dr. KANIMOZHI SUGUNA S
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE
SRM IST, FACULTY OF SCIENCE AND HUMANITIES,
RAMAPURAM, CHENNAI, TAMIL NADU, INDIA.
kanimozs4@srmist.edu.in

EDITORIAL BOARD: (Optional)

Dr. KANIMOZHI SUGUNA S
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE
SRM IST, FACULTY OF SCIENCE AND HUMANITIES,
RAMAPURAM, CHENNAI, TAMIL NADU, INDIA.
kanimozs4@srmist.edu.in

SESSION DESCRIPTION:

With the rapid expansion of IoT devices and large-scale wireless sensor networks, real-time intelligent perception systems have become essential for applications such as smart cities, autonomous monitoring, industrial automation, and environmental surveillance. However, these systems face critical challenges including security vulnerabilities, adversarial attacks on machine-learning models, high computational loads, energy limitations, and the need for trustworthy decision-making.

This special session aims to bring together researchers from cybersecurity, image processing, machine learning, WSNs, and data science to explore advanced techniques for secure, efficient, and intelligent perception systems deployed at the edge. The session will focus on integrating deep learning-based sensing, lightweight cryptography, distributed intelligence, explainable AI, and secure communication frameworks to enable next-generation IoT sensing and imaging platforms.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

1. **Secure Machine Learning for IoT & WSN**
 - Adversarial machine learning for sensor and image data
 - Federated learning and privacy-preserving learning models
 - ML-based attack detection and anomaly classification in WSN
 - Secure edge AI accelerators for real-time perception
2. **Intelligent Image Processing on Resource-Constrained Edge Devices**
 - Lightweight CNNs, transformers, and neuromorphic models for edge imaging
 - Energy-aware image processing and feature extraction in WSN cameras
 - Edge-based computer vision for surveillance and environmental monitoring
3. **Cybersecurity for Vision-Enabled IoT and Sensor Networks**
 - Lightweight cryptography and blockchain for WSN
 - Secure image transmission, watermarking, and authentication
 - Intrusion detection systems for IoT sensor networks
 - Post-quantum security for distributed sensing systems
4. **Data Science & Analytics for Distributed Sensor and Vision Data**
 - Multimodal sensor fusion and decision-making
 - Big-data analytics pipelines for large-scale sensor networks
 - Distributed anomaly detection using graph neural networks (GNNs)
5. **Next-Generation IoT Architectures**
 - 6G-enabled intelligent sensing and ultra-reliable IoT
 - Digital twins for WSN and visual sensing systems
 - Edge–fog–cloud collaborative computing frameworks
6. **Innovative Computing for Secure Perception**
 - TinyML, embedded AI, and hardware-aware optimization
 - Quantum machine learning for secure IoT sensing
 - Bio-inspired and swarm intelligence for adaptive WSN monitoring

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **[session name] on or before [20th February 2026]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://iccdm-conf.com/paper_submission. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify [**Session Name: Secure Intelligent Perception Systems for IoT, Edge, and Wireless Sensor Networks**] at the top (above paper title) of the first page of your paper.

* * * * *