The Tenth International Symposium on Security and Sensor-Cloud Systems (SCS 2024)

Sensor networks, despite their unprecedented capabilities in building smart systems through sensing and monitoring applications, face significant challenges due to inherent limitations in memory, energy, computation, communication, and scalability. Efficient and secure management of the vast volumes of sensor data remains a critical hurdle for researchers and practitioners in this field. Sensor networks offer tremendous benefits to humans, yet their full potential can only be realized through advanced integration techniques. The integration of sensor networks with cloud computing—known as Sensor-Cloud Systems—opens new avenues for long-term operation, analysis, and diverse applications. Furthermore, incorporating edge computing enhances real-time processing and decision-making capabilities by bringing computation closer to the data source. This synergy between sensor networks, cloud computing, and edge computing offers powerful solutions but also introduces a plethora of research and practical challenges. Key issues include ensuring robust security, effective management, seamless real-time data processing, and the establishment of large-scale computing infrastructure and network frameworks.

This workshop aims to explore a broad range of techniques, methodologies, models, and applications in the domains of sensor-cloud systems, emphasizing enhanced security solutions. Possible topics include but are not limited to:

- Secure Model and Architecture for Sensor-Cloud Systems
- Design and Integration of Sensor-Cloud Systems
- Efficient and Secure Data Dissemination and Storage in Sensor-Cloud Systems
- Data Privacy and Security in Sensor-Cloud Systems
- Sensor Cloud Systems for Remote and Secure Monitoring
- Trustworthy Computing and Secure Protocols in Sensor-Cloud Systems
- Reliability Issues in Sensor-Cloud Systems
- Mobile Sensing Applications, Detection, and Transmission in Sensor-Cloud Systems
- Data Mining and Processing in Sensor Networks
- Secure and Remote Management of Sensor-Cloud Systems
- Privacy Preservation in Sensor-Cloud Systems
- Edge Computing Integration with Sensor-Cloud Systems
- AI and Machine Learning Applications in Sensor-Cloud Systems
- Large and Small Model Deployments in Sensor-Cloud Systems
- Real-time Data Processing and Analytics in Edge and Cloud Environments
- Optimization Techniques for Resource Management in Sensor-Cloud Systems
- AI-driven Security Solutions for Sensor-Cloud Systems
- Cloud-Edge Architectures for Enhanced Security and Efficiency
- Autonomous and Intelligent Systems in Sensor-Cloud Environments

Chairs:

Tian Wang, Beijing Normal University, China

Arun Kumar Sangaiah, School of Computing Science and Engineering, Vellore Institute of Technology (VIT), India

Tianhui Meng, Beijing Normal University, China