The 21st International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIHMSP 2025)

October 15-17, 2025, The Splendor Hotel, Taichung, Taiwan

Special Session on <u>Applications of Intelligent Internet of Things And Communications</u>

Call for Papers

Organizers: Prof. Yung-Fa Huang, Prof. Cheng-Ying Yang and Prof. Jong-Shin Chen

This Special Session is dedicated to Internet of Thing technologies including the intelligent applications which through various micro-sensors implanted in the wafer with a wireless network connecting the Internet. To realize people and objects dialogue, exchange of dialogue between people and objects, and among objects and objects are very important for current research trends in computer science. So that the object in contact with people's lives can become wiser. Research on key technologies for sensing and communication integration can achieve integration gains. Sensing and communication functions share the same hardware and/or wireless resources. According to the different integration degrees, the Integrated Sensing and Communications (ISAC) waveform design can be divided into loose integration of non-shared resource allocation and strict integration of resource sharing configuration, and the ultimate goal and challenge is to achieve a fully unified waveform. The goal of this special issue is to provide an opportunity for researchers, engineers and scientists to publish their research results related to the Innovative applications of Internet of Things and the ISAC.

The topics covered in this Special Session include, but are not limited to, the following areas:

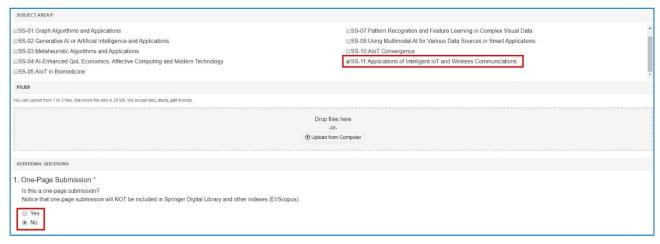
Topics of interest include but are not limited to the following:

- IoT enabling technologies
- IoT system architecture
- Joint Communications and Sensing; RadCom, Radar-Based Communication Security of IoT
- Sensing-assisted communications
- The innovation of Apps
- Iot mobile services
- The recommender system based on IoT
- Intelligent computing and its applications on IoT
- Power efficiency of IoT
- Communication techniques for IoT
- Iot and Edge computing (fog computing)
- Context-aware Networks

- Simultaneous localizationand mapping
- Wireless signal coverage
- Hand gesture identification
- Human activity identification
- High-precision positioning and tracking
- Waveform design optimization,
- Spatial sensing and communication beam pattern optimization,
- Self-interference cancellation,
- Wireless and system resource allocation optimization,
- ISAC system security enhancement

Submissions:

Papers should follow the template announced on the IIHMSP 2025 conference website (https://iihmsp25.csie.cyut.edu.tw), and be submitted via Microsoft CMT system and then select SUBJECT AREAS: SS-11:Applications of Intelligent IoT and Wireless Communications for submission (please refer to the following captured figure).



Conference Proceeding Information:

Papers that are presented orally at the conference and meet the publication requirements of IIHMSP-2025 conference proceedings will be published in Springer's book series titled "Smart Innovation, Systems and Technology". Normally, this series will be indexed by Scopus and EI Compendex.

Important Dates: (If IIHMSP 2025 extends the dates, follow those dates announced on the website)

Paper submission deadline: May 30, 2025 Acceptance notification: July 30, 2025

Camera-ready copy and registration: July 15, 2025

For more information:

Please visit the IIHMSP 2025 official websites (https://iihmsp25.csie.cyut.edu.tw or https://iihmsp25.github.io/) or contact the organizers of this special session as follows:

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