

ETFA 2025

Porto Portugal

9-12 September

30th IEEE International Conference on Emerging Technologies and Factory Automation

Call for Papers

SS04 – Internet of Things (IoT) for Smart Maritime Ports

Organized and Chaired by
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FOCUS

Maritime ports are evolving into smart energy hubs, integrating renewable energy sources and advanced digital infrastructure to support global trade and environmental sustainability. This special session aims to explore the deployment of underwater networks in maritime ports for real-time energy monitoring, asset tracking, and environmental management. These systems can enable robust monitoring of underwater energy assets such as tidal turbines and underwater cabling, while facilitating data-driven decision-making for renewable energy distribution and ship routing. The special issue aims to contribute to the vision of sustainable smart ports, bridging the gap between underwater technologies and green energy innovation.

TOPICS

- ❖ Underwater networking and sensing
- ❖ Cross-medium communication (i.e., water to air communication)
- ❖ Underwater Multipath and Interference Evaluation for IoUT systems
- ❖ Communication and sensing for maritime operation
- ❖ IoT applications in autonomous shipping
- ❖ IoT for maritime communication and navigation
- ❖ Addressing maritime cybersecurity in the IoT era
- ❖ 5G/6G in maritime environment
- ❖ Non-Terrestrial Networks for maritime IoT, including satellite, airborne, surface and underwater
- ❖ IoT-enabled marine environment monitoring and sensing

AIM

This Special Session aims at bringing together professionals from industry and academia to share cutting-edge concepts, recent developments, research results, and practical achievements in Internet of Things to enable Smart Maritime Ports or similar environments.

CONFERENCE FORMAT

The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP), industry practice sessions.

AUTHOR'S SCHEDULE (2025)

❖ Regular and special sessions papers

Submission deadline **April 18**
Acceptance notification **May 23**
Deadline for final manuscripts **July 4**

❖ Work-in-progress/Industry practice papers

Submission deadline **May 30**
Acceptance notification **June 20**
Deadline for final manuscripts **July 4**