

Special Session on:  
Navigating the Opportunities and Challenges in Maritime IoT

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Aveiro Congress Center, Portugal

In conjunction with IEEE WF-IoT 2023



## Navigating the Opportunities and Challenges in Maritime IoT

### Organizing Chairs:

#### Rui Campos

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### Programme Committee:

TBC

### Description:

As maritime operations become increasingly interconnected and data-driven, the role of the Internet of Things (IoT) is becoming pivotal in supporting this evolution. This special session, part of the IEEE World Forum on Internet of Things, aims to address this fast-paced field. We will explore the newest advancements, identify unfolding opportunities, and tackle the persistent challenges that Maritime IoT presents. The session is envisioned to cover a comprehensive set of topics, from autonomous shipping, marine robotics and IoT-enabled maritime communications to maritime cybersecurity and marine environment sensing. We will also delve into the integration of emerging technologies like AI, big data, and edge computing within the Maritime IoT landscape. This convergence of technological domains promises to redefine the future of maritime operations, aligning it with the broader theme of the forum - "The Blue Planet: A Marriage of Sea and Space". By bringing together industry professionals, researchers, and technologists, we hope to spark discussions, inspire innovative thinking, and catalyze collaborations. Our shared objective is to explore ways to navigate the opportunities and challenges in Maritime IoT, aiming for safer, more efficient, and sustainable maritime industry and environment. Join us in charting the course for the future of Maritime IoT.

### Topics of Interest:

The unique appeal of this session lies in its spotlight on the innovative technical breakthroughs within Maritime IoT. We welcome original, high-quality papers on topics including but not limited to:

- IoT-enhanced marine environmental sensing;
- 5G/6G for maritime IoT;
- Non-Terrestrial Networks, including airborne and satellite;
- Underwater communications (acoustics, radio, optical);
- Next-generation maritime communication systems;
- Marine robotics;
- The synergy of emergent technologies such as AI, big data analytics, and edge computing with Maritime IoT.

### Paper Submission:

All papers must be submitted through eWorks. You must choose the special session track (Spes-07) when submitting your paper in order to be considered for this workshop. The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

The paper can be prepared using the template available through the Authors / Proposers tab from the WF-IoT conference website main page at:

<https://wfiot2023.iot.ieee.org>.

Authors of accepted papers will need to provide a final version of your paper in PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.

### More information on the Special Session:

<https://wfiot2023.iot.ieee.org/navigating-opportunities-and-challenges-maritime-iot>

