

## Special Issue

# Data/Knowledge-Driven Behaviour Analysis for Maritime Autonomous Surface Ships—2nd Edition

### Message from the Guest Editors

Understanding, modeling, and predicting ship behaviors are fundamental and essential issues for planning, controlling, and operating different levels of Maritime Autonomous Surface Ships (MASS). The maritime traffic data (e.g., radar data, AIS data, CCTV data, etc.) provide designers, officers on watch, and traffic operators with extensive information about the states of ships at present and in history, which are the treasure for behavior analysis. With the successful Special Issue "Data/Knowledge-Driven Behaviour Analysis for Maritime Autonomous Surface Ships" in 2021, this special issue is continuing to provide an excellent medium to present the latest developments on methods and tools suitable for relevant issues, including but not limited to:

- Data-driven behavior modeling and simulation
- Knowledge-driven behavior modeling and reasoning
- Multi-source heterogeneous traffic data fusion
- Semantic analysis of ship behaviors
- Quantifying COLREGs and seamanship for machine
- Inference engine and ontology reasoning for rule-compliant MASS
- Maritime traffic situational awareness
- Multi-agent simulation
- Risk analysis and management of MASS

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### Guest Editors

Prof. Dr. Yuanqiao Wen

Prof. Dr. Axel Hahn

Dr. Osiris Valdez Banda

Prof. Dr. Yamin Huang

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### Deadline for manuscript submissions

closed (10 May 2024)



## Journal of Marine Science and Engineering

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## About the Journal

### Message from the Editor-in-Chief

*Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312)* focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).