

Special Issue

Data/Knowledge-Driven Behaviour Analysis for Maritime Autonomous Surface Ships

Message from the Guest Editors

Understanding, modeling, and predicting ship behavior 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) provide designers, officers on watch, and traffic operators with extensive information about the states of ships at present and in history, which are a treasure for behavior analysis. Thus, this Special Issue aims to provide a 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;
- Multisource heterogeneous traffic data fusion;
- Semantic analysis of ship behaviors;
- Quantifying COLREGs and seamanship for machine;
- Inference engine and ontology reasoning for rule-compliant MASS;
- Intention inference based on behavior observations;
- Maritime traffic situational awareness;
- Multiagent simulation;
- Risk analysis and management of MASS;
- Safety and cybersecurity of MASS.

Guest Editors

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Deadline for manuscript submissions

closed (15 June 2022)



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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.

Editor-in-Chief

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