

## Special Issue

# Machine Learning for Prediction of Ship Motion

### Message from the Guest Editors

Ship motion prediction is crucial in maritime operations, particularly in navigation safety, control, and operational efficiency. Since the advancement of machine learning, researchers have increasingly explored data-driven approaches to enhance the accuracy and reliability of ship motion forecasting. This Special Issue highlights the latest advancements in machine learning techniques for short-term time series prediction of ship motion and system identification methods for estimating hydrodynamic coefficients related to seakeeping and maneuvering. We welcome high-quality papers directly addressing various aspects of ship motion prediction, including, but not limited to, the following:

- Machine learning-based short-term time series prediction for ship motion;
- Data-driven approaches for ship maneuvering and seakeeping analysis;
- System identification methods for estimating hydrodynamic coefficients;
- Applications of AI in ship stability, route optimization, and safety enhancement.

### Guest Editors

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### Deadline for manuscript submissions

25 September 2025



## Journal of Marine Science and Engineering

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Impact Factor 2.8  
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## About the Journal

### Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE, ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi  
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