Special Issue

Artificial Intelligence Applications in Underwater Sonar Images

Message from the Guest Editors

The processing of underwater sonar image data has always been a fundamental technology for ocean exploration. In recent years, there has been a growing use of artificial intelligence techniques for analyzing sonar images. This Special Issue aims to explore the application of AI technology in underwater sonar imagery to effectively address real-world problems and advance the development of AI in the underwater sonar image industry. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Detection of targets in underwater sonar images by deep learning methods.
- Image segmentation of seabed geomorphological terrain using artificial intelligence techniques.
- Innovative artificial intelligence models.
- Acquisition and production of underwater sonar image datasets.
- Proposing a new paradigm for artificial intelligence techniques.
- New concepts and advanced sonar detection equipment for underwater sonar images.
- Underwater simultaneous localization and mapping based on sonar information perception.
- Underwater acoustic radiation and scattering.

Guest Editors

Prof. Dr. Feihu Zhang
Dr. Xue Du
Dr. Zhixiong Gong

Deadline for manuscript submissions

closed (10 May 2025)

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Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

mdpi.com/journal/jmse

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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

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

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