

## **ARCAI 2024 Special Session "AI in Marine Science"**

Principal Organizer(s): Juan Li, Haiyong Zheng, Daoling Li, Zonghua Liu, John Watson

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Call for Papers:

The application of artificial intelligence (AI) in marine science is a rapidly evolving field with significant potential to transform our understanding and management of the world's oceans. As we continue to explore and utilize marine resources, the integration of AI technologies offers new opportunities for data analysis, environmental monitoring, and predictive modeling etc. in marine ecosystems. The "AI in Marine Science" Special Session aims to bring together researchers, engineers, experts and practitioners in the field of marine science to explore the latest advances, challenges, and future directions in the application of AI to marine science. This special session provides a unique platform for discussing innovative AI techniques, methodologies, and applications that can address key challenges and opportunities in marine science. We invite submissions that address the following topics and more:

Topics of the Session include but are not limited to

- AI-driven data analysis and modeling for marine environmental monitoring and prediction
- Machine learning applications in oceanographic research
- Deep learning for underwater imaging, object detection and classification
- Predictive modeling of marine ecosystems and climate change
- AI-based Autonomous underwater vehicles (AUVs) and robotic systems
- AI in fisheries management and sustainable resource utilization
- Smart sensors and IoT for real-time marine data acquisition
- AI-assisted decision-making resource management and conservation

Each submission should be regarded as an undertaking that, should the submission be accepted, at least one of the authors must register the paper in order for all of the high-quality papers to be recommended to submit into the related SCI indexed journals, such as,

Computers & Electrical Engineering (SCI)  
Frontiers in Marine Science (SCI)  
Information Processing in Agriculture (SCI)

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Accepted and presented papers will be submitted for inclusion and indexed by EI Compendex and Scopus, subject to meeting EI scope and quality requirements. Selected papers will be invited to SCI Journal Special Issues.

**Submission site:** <https://cmt3.research.microsoft.com/ARCAI2024>

**Note:** Please select “Special Session on AI in Marine Science” when submitting your paper and the full paper/abstract submission is due by June 1, 2024 (The submission time may be delayed, please refer to the website notification for details: <https://www.icarcai.org/call-for-papers>.)

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