Special Issue

Navigation and Detection Fusion for Autonomous Underwater Vehicles

Message from the Guest Editors

This Special Issue tackles critical challenges and offers innovative solutions in the realm of autonomous underwater vehicle (AUV) navigation and object detection. AUVs are pivotal in a range of marine applications, including environmental monitoring, scientific research, and defense. Explored topics encompass sensor fusion techniques, cutting-edge sonar and imaging technologies, path planning algorithms, and machine learning methods aimed at optimizing underwater exploration and data collection. The research presented in this special issue is pivotal for enhancing AUV capabilities and performance across a spectrum of underwater missions, rendering it an invaluable resource for researchers, engineers, and organizations engaged in marine technology and exploration. This Special Issue aims to share relevant scientific work focused on everything from large-scale patterns to detailed aspects and case studies, encouraging the publication of new emerging information that contributes to knowledge in the field of navigation in general, focusing on but not limited to detection fusion for Autonomous Underwater Vehicles.

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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.

Editor-in-Chief

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