Special Issue

Multi-Source Data Supported Maritime Traffic Knowledge Discovery for Autonomous Ship Navigation

Message from the Guest Editors

The shipping industry has become a critical component of global logistics along with continuous advancements in science and technology. Smart ships are proposed and developed for the purpose of enhancing maritime traffic safety and efficiency. Multi-source maritime data supported traffic situation awareness and knowledge discovery helps smart ships obtain precise traffic environmental information. Smart ships may encounter varied yet unexpected navigation challenges. For instance, smart ships may fail to identify nearby ships under adverse weather conditions even if they are deployed with varied visual/ non-visual sensors. In this way, smart ships may make unreasonable navigation decisions, which can trigger severe maritime traffic accidents. We also recommended developing robust ship navigation and identification models to help autonomous ships safely sail in waterways, such as ship detection and collision avoidance, ship route optimization, etc.

Guest Editors

Dr. Xinqiang Chen

Prof. Dr. Huafeng Wu

Prof. Dr. Dezhi Han

Prof. Dr. Octavian Postolache

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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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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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