Special Issue

Sensor Fusion Applications for Navigation and Indoor Positioning

Message from the Guest Editor

Indoor positioning has many applications, including in navigation, asset tracking, wayfinding, and location-based advertising. In comparison with outdoor environments, indoor environments are more complex an contain multiple objects. There are many sensors that can be used for indoor positioning, but all of them have some limitations. Therefore, sensor fusion is employed to combine measurements from multiple sensors for improved positioning accuracy and reliability. We encourage authors from academia and industry to submit new research results related to sensor fusion for indoor positioning and navigation. The topics include but are not limited to the following:

- Multiple sensors:
 - Wi-Fi, Bluetooth, ultra-wideband (UWB), radio frequency identification (RFID), etc.
 - Computer vision, light detection and ranging (Lidar), maps or landmarks, etc.
 - Odometers, inertial measurement units (IMUs), magnetic sensors, etc.
- Sensor fusion methods:
 - Fusion levels: raw data; detections; tracks, etc.
 - Fusion algorithms: KF, EKF, UKF, CNN, fuzzy logic, etc.
- Indoor positioning applications: navigation, asset tracking, wayfinding, etc.

Guest Editor

Dr. Jianguo (Jack) Wang

Transport Research Centre, Faculty of Engineering and Information Technology, University of Technology Sydney (UTS), 81 Broadway, Ultimo, NSW 2007, Australia

Deadline for manuscript submissions

closed (15 April 2025)



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/175138

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/ sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

