



Mapping and Localization for Intelligent Vehicles in Urban Canyons

Guest Editor:

Dr. Xiwei Bai

Department of Aeronautical and Aviation Engineering, The Hong Kong Polytechnic University, Hong Kong, China

Deadline for manuscript submissions:

30 December 2024

Message from the Guest Editor

The aim of this Special Issue is to delve into the innovative methodologies, technologies, and research advancements that address these challenges for intelligent vehicles. Contributors to this Special Issue are encouraged to present their latest work on high-precision GNSS, high-definition map, advanced sensor fusion, LiDAR and computer vision techniques, machine learning models for environmental perception, and V2X communication systems that contribute to the reliability and accuracy of vehicle localization in challenging urban settings. The ultimate goal is to advance intelligent vehicle navigation technologies and foster the development of smart cities where such vehicles can operate seamlessly and safely in urban canyons.

Keywords

- GNSS positioning
- High-definition map
- Urban canyons





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)