



Visual Localization—Volume II

Guest Editor:

Prof. Dr. Rémi Boutteau

Laboratoire d'Informatique, du
Traitement de l'Information et
des Systèmes (LITIS), University
of Rouen Normandy, 76800 Saint
Etienne du Rouvray, France

Deadline for manuscript
submissions:

closed (30 April 2024)

Message from the Guest Editor

The tasks involved in autonomous navigation (UAVs, robots and autonomous vehicles) can be categorized into five major modules: perception, localization, mapping, planning and control.

The localization module aims to determine the vehicle's pose (3D location and orientation) and plays a critical role in autonomous navigation. Navigation safety and comfort are highly dependent on the accuracy and robustness of this module.

This localization can be absolute (GPS coordinates or metric coordinates in a known map) or relative (the localization of the vehicle with respect to its lane, with respect to its initial pose, etc.). Although there are systems dedicated to localization, such as GPS, the accuracy of localization and signal loss in difficult environments (indoor or urban environments) make them unsuitable for autonomous navigation.

When the localization module uses only one camera, it is referred to as visual localization. The latter is particularly important for improving the accuracy and robustness of localization in difficult environments.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Raimondo Schettini

Department of Informatics,
Systems and Communication,
University of Milano-Bicocca,
viale Sarca, 336, 20126 Milan, Italy

Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

Author Benefits

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

High Visibility: indexed within Scopus, ESCI (Web of Science), PubMed, PMC, dblp, Inspec, Ei Compendex, and other databases.

Journal Rank: CiteScore - Q2 (*Computer Graphics and Computer-Aided Design*)

Contact Us

Journal of Imaging Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/jimaging
jimaging@mdpi.com
[X@J_Imaging_MDPI](https://twitter.com/J_Imaging_MDPI)