# Deep Learning for Simultaneous Localization and Mapping (SLAM)

Guest Editors:

**Dr. Yasir Latif**
Australian Institute for Machine Learning (AIML), School of Computer Science, University of Adelaide, SA 5005, Australia

**Dr. Pulak Purkait**
Australian Institute for Machine Learning (AIML), School of Computer Science, University of Adelaide, Adelaide, SA 5005, Australia

Deadline for manuscript submissions:
**closed (31 August 2021)**

## Message from the Guest Editors

Simultaneous Localization and Mapping (SLAM) is a fundamental problem in mobile robotics that allows a robot to localize itself against a previously unseen environment while simultaneously constructing a representation of it. With the recent resurgence in deep learning techniques, challenges in the traditional-geometry-based SLAM have been addressed with learning-based techniques. Similarly, the multiview localization capability of SLAM has been exploited to learn better models. While progress is being made in traditional-geometry-based SLAM techniques, deep learning introduces a new set of tools that can be leveraged to further improve the performance of SLAM systems.

This Special Issue focuses on Simultaneous Localization and Mapping in general and encourages submissions that further the state of the art of both geometry-based SLAM and methods that focus on how deep learning can help SLAM.

Special Issue

## Editor-in-Chief

**Prof. Dr. Wolfgang Kainz**
Cartography and Geographic Information Science, Department of Geography and Regional Research, University of Vienna, Universitätsstr. 7, A-1010 Vienna, Austria

## Message from the Editor-in-Chief

The *ISPRS International Journal of Geo-Information* invites you to submit research articles, reviews, and reports covering topics of the whole domain of geo-information. Although the journal was only founded in 2012, it has already achieved wide recognition in the scientific community. We are proud that since April 2015, our journal is indexed by the SCIE of the Web of Science. As Editor-in-Chief, I encourage you to consider *IJGI* for your scientific papers and would be pleased to welcome you as authors.

## 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), GeoRef, PubAg, dblp, Astrophysics Data System, Inspec, and other databases.
**Journal Rank:** JCR - Q2 (*Remote Sensing*) / CiteScore - Q1 (Geography, Planning and Development)

## Contact Us