



## 3D Scene Understanding and Object Recognition

Guest Editors:

**Dr. Francisco Gomez-Donoso**

University Institute for Computer Research, University of Alicante, P.O. Box 99, 03080 Alicante, Spain

**Dr. Félix Escalona Moncholí**

University Institute for Computer Research, University of Alicante, P.O. Box 99, 03080 Alicante, Spain

**Prof. Dr. Miguel Angel Cazorla**

University Institute for Computer Research, University of Alicante, P.O. Box 99, 03080 Alicante, Spain

Deadline for manuscript submissions:

**closed (20 September 2023)**

### Message from the Guest Editors

Three-dimensional data have become widespread in recent years due largely to the rise of self-driving cars and intelligent vehicles. These new transportation systems are fitted with LiDAR, ToF cameras, stereo setups and a range of other devices providing 3D data on nearby surroundings. Furthermore, 3D data are actively used in the industry for quality testing and other tasks, as well as in consumer devices, such as smartphones. Moreover, most robots are equipped with a device able to perceive this kind of info.

Managing 3D data is thus of the utmost importance, and the ability to optimally perform guidance and navigation, object recognition and detection, reduction in noise and other related tasks is a hot research topic today.

Against this background, we propose this Special Issue focused on 3D scene understanding and object recognition with an emphasis on new algorithms and applications using 3D data. Topics of interest include:

- Learning-based 3D object recognition;
- Monocular depth estimation;
- Navigation algorithms based on 3D data;
- Registration and map creation;
- Noise reduction in 3D data.





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](http://www.mdpi.com)

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