Special Issue

Object Detection and Recognition for Intelligent Robotic Systems

Message from the Guest Editors

Effective perception is crucial for the interaction between high-performance robots and their environment. This Special Issue aims to present new ideas and experimental results in the field of high-performance sensing and interpretation, from theory, and the development of sensing devices and recognition algorithms to various civilian, medical, and military applications. Potential applications of the techniques include autonomous driving, smart manufacturing systems, medical 3D imaging for tumor management, unmanned aerial vehicles (UAV), smart missiles, and robots. Advanced techniques, such as acoustic/infrared/tactile imaging, artificial intelligence, machine learning, and deep learning, which are beneficial for achieving highly reliable object detection and recognition are also topics of interest. Keywords

- scene analysis
- object detection
- object recognition
- visual navigation
- visual servoing
- event-based vision
- robotic manipulation
- unmanned aerial vehicle (UAV)
- acoustic imaging
- tactile imaging

Guest Editors

Prof. Dr. Yau-Zen Chang

Department of Mechanical Engineering, Chang Gung University, Taoyuan 33302, Taiwan

Dr. Chin Hsia

Department of Mechanical Engineering, Chang Gung University, Taoyuan 33302, Taiwan

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

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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.

Editor-in-Chief

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

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