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Object Detection and Recognition for Intelligent Robotic Systems

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Message from the Guest Editors

Dear Colleagues,

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











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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

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