Special Issue

Image-Based Object Detection

Message from the Guest Editor

Image-based object detection, a cornerstone of computer vision, enables machines to identify and localize objects in visual data, underpinning advancements in autonomous driving, surveillance, medical imaging, and robotics. In recent years, transformative progress, driven by deep learning, has been made, from convolutional neural networks (CNNs) to transformer-based architectures, yet critical challenges persist, such as handling occlusions, small/low-light objects, domain shifts, and real-time efficiency in dynamic environments. This Special Issue aims to showcase cutting-edge research addressing these hurdles. We welcome the submission of original contributions focused on novel algorithms, benchmark datasets, robustness enhancements (e.g., against adversarial attacks), and cross-domain applications. By integrating theoretical innovations with practical solutions, this Special Issue seeks to accelerate the translation of image-based detection technologies to real-world impacts.

Guest Editor

Dr. Jinxing Li
School of Computer Science and Technology, Harbin Institute of Technology, Shenzhen 518051, China

Deadline for manuscript submissions

20 April 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/253455

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

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

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)