# **Special Issue**

### Object Detection and IOU Based on Sensors: Methods and Applications

### Message from the Guest Editor

With the development of sensors, Intersection over Union (IoU) for object detection based on sensors has been widely used in various fields. Intersection over union is an evaluation metric used to measure the accuracy of an object detector on a particular dataset. Intersection over union can be used to evaluate the performance of HOG + linear SVM object detectors and convolutional neural network detectors (R-CNN, Faster R-CNN, YOLO, etc.). This Special issue focuses on "Object Detection and IOU Based on Sensors: Methods and Applications". The Special Issue aims to provide a state-of-the-art overview of object detection, object tracking, and object recognition. Potential topics include, but are not limited to, the following:

- Intersection over union (IoU) for object detection and recognition;
- Convolutional neural networks (CNN) for object detection and recognition;
- YOLO (real-time object detection);
- Sensor and sensing technologies for object detection and recognition;
- Image classification;
- Image segmentation;
- Three-dimensional computer vision;
- Three-dimensional object detection and recognition;
- Visual surveillance and monitoring.

### Guest Editor

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### Deadline for manuscript submissions

closed (15 March 2024)



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### Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological

developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

#### Editor-in-Chief

#### Prof. Dr. Vittorio M. N. Passaro

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