Special Issue

Object Detection Based on Vision Sensors and Neural Network—2nd Edition

Message from the Guest Editors

Object detection has been a research hotspot in computer vision for a long time. Nowadays, it is gaining increasing popularity from the research community and industry with the rapid development and deployment of enabling technologies, such as deep neural networks (DNNs) and high-resolution vision sensors. The past few years have witnessed tremendous successful applications of DNNs and their performance. However, mainstream DNNs tend to become more complex in computation, deeper in network structures, and larger in size in the training datasets. This has created a barrier to employing both data and computationally intensive DNNs on resource-limited vision sensors for applications such as object detection, especially in a timely manner. This Special Issue looks at object detection from another angle, aiming to solicit state-of-the-art research efforts and works that can be employed to enable object detection in a more lightweight way, considering the resource constraints of vision sensors.

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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.

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