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Object Detection Based on Vision Sensors and Neural Network

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Message from the Guest Editors

Dear Colleagues,

For a long time, object detection has been a research hotspot in computer vision. Nowadays, it is gaining increasing popularity from the research community and industry with rapid development and deployment of enabling technologies. This Special Issue looks at object detection from another angle, aiming to solicit the state-of-the-art research efforts and works that can be employed to enable object detection in a more lightweight way taking into account the resource constraints of vision sensors. For this purpose, below are the topics to be included in this Special Issue but not limited to:

- Computation efficient lightweight DNNs;
- Object detection in data streams;
- One shot object detection;
- Object detection on the move;
- Edge computing in support of object detection on sensors;
- Neural network compression techniques;
- Federated learning for object detection;
- Bio-inspired sensing technologies;
- Real-time object detection techniques;
- New object representation techniques;
- Swarm learning for object detection in a collective manner:
- High-performance sensing systems.



Dr. Man Qi Dr. Matteo Dunnhofe Guest Editors











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Message from the Editor-in-Chief

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