



## Application of Machine Vision and Deep Learning Technology

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### Message from the Guest Editors

Machine vision is a branch of artificial intelligence that is developing rapidly. Machine vision technology aims to use machines to measure and judge things instead of human eyes. In recent years, with the continuous development of deep learning, its unique end-to-end learning concept and outstanding data analysis ability have helped machine vision technology to achieve higher accuracy in image classification, target recognition, and semantic segmentation, increasing its use in security, driverless cars, smart home, medical imaging, and other fields. In this Special Issue, the recent efforts and advances made in machine vision and deep learning will be discussed.

- machine vision
- deep learning
- 3D sensing
- optical imaging and measurement
- super-resolution imaging
- image processing
- artificial intelligence and photonic neural network
- target recognition
- neural network and optimization
- semantic segmentation and understanding
- automatic optical inspection, industrial product testing, driverless car, character recognition, tracking and positioning, etc. hardware, algorithm, and techniques relating to machine vision

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## Message from the Editor-in-Chief

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