



## Machine Learning for Object Detection and Scene Description in Images and Videos

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Deadline for manuscript submissions:

**31 August 2024**

### Message from the Guest Editors

Object detection and scene description are fundamental to advancing computer vision as a tool for automatically understanding the human environment. Recognizing and interpreting objects and scenes is critical for machines to understand and interact with the world. This understanding forms the basis for more complex tasks like image and video analysis, autonomous navigation, and interactive systems. These technologies have various applications across various industries, namely healthcare, robotics, automotive, security, etc. Object detection and scene description improve the interaction between humans and computers, making it more intuitive. Improving object detection and scene description models' accuracy, speed, and robustness remains crucial, driving innovation in machine learning algorithms and computational strategies. This Special Issue aims to present recent advances in object detection, semantic and instance segmentation, image captioning, visual question answering, scene modeling, object tracking, video summarizing, action recognition, and all other fields related to machine learning.





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## Message from the Editor-in-Chief

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