



Deep Perception in Autonomous Driving

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Message from the Guest Editors

The perception of the physical environment plays an essential role in the field of autonomous driving. Starting with the technical equipment within vehicles, autonomous driving is ushering in fundamental changes. This opens amazing opportunities to achieve innovative autonomous driving functions but also imposes exciting challenges for the perception system and associated multimodal data processing/understanding modules. With this Special Issue, we attempt to showcase the latest advances and trends in deep learning-based techniques to build 'autonomous driving friendly' perception models. The main topics of interest (but are not limited to):

- Visual, LiDAR and radar perception;
- 2D/3D object detection, 2D/3D object tracking;
- Domain adaption for classification, detection, segmentation;
- Scene parsing, semantic segmentation, instance segmentation and panoptic segmentation;
- Human-centric visual understanding, human-human/object interaction understanding;
- Human activity understanding, human intention modeling;
- Person re-identification, pose estimation and part parsing;
- Vehicle detection, pedestrian detection and road detection.





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Message from the Editor-in-Chief

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