Special Issue

Intelligent Vehicle, Infrastructure Perception and Control Based on Imaging and Sensing

Message from the Guest Editors

In the last few years, we have seen a growing interest in intelligent vehicles and smart transportation, which are improving many aspects of transportation systems. With sensors, including cameras, LiDAR, radar, advanced imaging, 3D point cloud, and communication technologies, the automotive industry and transportation systems are moving toward intelligent vehicles and advanced infrastructure perception and. Intelligent vehicles and roadway infrastructure need to perceive their surrounding environment, and as such, major challenges include accurately perceiving the environment, detecting obstacles, and extracting road condition information. Intelligent vehicles utilize sensors to derive images and understand external and internal environments; therefore, sensing and imaging are the foundations for driving intelligent vehicles and smart transportation. Similar technologies can also be utilized to digitalize road infrastructure. This Special Issue aims to compile original research and review articles on recent advances, technologies, solutions, applications, and new challenges in the field of intelligent vehicles and smart transportation.

Guest Editors

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Dr. Hao Xu

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Deadline for manuscript submissions

closed (31 March 2025)



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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.

Editor-in-Chief

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