Special Issue

Advances in Remote Sensing of Solving Challenges in Autonomous Driving and Safety Analysis

Message from the Guest Editors

As safety is the prime priority and the key issue in commercializing autonomous vehicles, the main challenge in the research field has become to increase safety, and more in general the system performance, in critical and unique working conditions. Remote sensing and image processing applications play the main role in designing optimal solutions based on sensory and observation data such as modeling the changes in the pattern distribution of LIDAR 3D point clouds in snowfall weather conditions and improving the localization accuracy by matching map observation environmental features. Therefore, this Special Issue aims to add value to the autonomous vehicle research field by demonstrating and analyzing critical and unique problems of mapping, localization, perception and path-planning modules. **Keywords:**

- autonomous vehicles
- 3D point cloud analysis
- path planning with unprotected turns
- robust perception of construction areas
- SLAM-based mapping in challenging environments
- road pavement assessment for driving safety analysis
- object status classification in urban traffic conditions
- .....

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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