# Special Issue

# Applications of Remote Sensing and GIS to Solve Challenges in Autonomous Driving and Analyze Roadway Safety

## Message from the Guest Editors

The main challenge in autonomous vehicles has become to solve the critical and unique problems such as precise localization in snow–rain road conditions, generating accurate and large maps by SLAM technologies, far detection of construction areas for smooth path planning, maneuvering with the existence of unprotected turns, making a robust decision on classifying stationary vehicles as obstacles or temporarily stopped due to traffic jams and traffic signal recognition in sun glare. 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. 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.

## Guest Editors

Dr. Mohammad Aldibaja

Dr. Zheng Liu

Dr. Hanbing Wei

## Deadline for manuscript submissions

closed (16 May 2023)

# About the Journal

### 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.

### Editor-in-Chief

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