Special Issue

Advancements in Sensing and Perception for Autonomous Vehicles in Adverse Environmental Conditions

Message from the Guest Editor

The evolution of autonomous vehicles is inextricably linked to the sophistication of their perception systems. Specifically, a significant and persistent challenge in this field lies in the performance of perception systems under adverse weather conditions.

Topics of Interest:

1. Enhanced Sensor Technologies;
2. AI and Deep Learning in Data Interpretation;
3. Sensor Fusion and Data Integration;
4. Real-Time Data Processing Architectures;
5. Simulation, Validation, and Robustness Testing;
6. End-to-End System Optimization;
7. Case Studies and Applications.

We are inviting you to contribute articles, perspectives, and reviews addressing the abovementioned topics, offering both theoretical insights and practical solutions to the challenges faced in optimizing perception systems for autonomous vehicles. This includes advancements in both hardware and algorithms, with a special focus on performance in adverse weather conditions.

Guest Editor

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Deadline for manuscript submissions

closed (15 March 2025)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/191697

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

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