Special Issue

Advances in Autonomous Driving and Human–Machine Interactions

Message from the Guest Editors

Autonomous technologies are rapidly advancing. While enhancing the convenience for drivers, this shift to "human–machine co-driving" requires intelligent human–machine interactions (MPIs) to be effective. Challenges persist, including the need for advanced interfaces for seamless information transmission to in-cabin occupants and improved emergency response capabilities without causing distractions. Autonomous vehicles face obstacles in conveying explicit information to other road users, necessitating effective communication strategies. Moreover, precise sensing, smart decision-making, and robust control systems are essential for operating in extreme conditions. Cybersecurity and ethical considerations are also critical aspects that must be addressed. Articles on the following topics are invited for submission:

- Autonomous driving technologies, methods, and algorithms;
- Human–machine interfaces;
- Advanced driving assistance systems;
- Automated driving in extreme conditions (e.g., automated drifting);
- Vehicle platooning and distributed control;
- Computer vision and sensing technologies in autonomous driving;
- Cybersecurity.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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