The Development and Prospects of Autonomous Driving Technology

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Message from the Guest Editors

Autonomous driving is a topic of great interest for developers, researchers, and even automotive integrators and manufacturers. Recently, it has drastically evolved not only due to technological advancement, but also due to the development of increasingly powerful and refined algorithms. However, autonomous driving is still a major challenge to become a daily reality.

This Special Issue aims to bring together, firstly, a state-of-the-art survey of the major challenges in autonomous driving, followed by a detailed study on each research line, including, but not limited to the following topics:

- State-of-the-art review of main challenges in autonomous driving
- Environmental perception
- Localization and mapping accuracy optimization
- Behavioral planning
- Motion prediction and planning
- Infrastructure-oriented decision-making algorithms for autonomous actions
- Autonomous vehicles and infrastructure communications
- Human-machine interaction in autonomous vehicles
- Field operational tests of autonomous vehicles
- Special applications of vehicle automation

Special Issue

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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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