Special Issue

Applications of Machine Learning in Automotive Engineering

Message from the Guest Editor

With the advent of automated and connected vehicles and increasing market share of electric vehicles with improving performance, the automotive industry is currently undergoing a technological revolution. These technological transformations pose significant challenges and yet offer new opportunities in the design and control of the vehicles. In this regard, recent advancements in machine learning and AI have shown potential benefits in various aspects in automotive engineering, from the design and control to monitoring and maintenance of the vehicles. In this Special Issue, we will discuss uses of machine learning for automotive engineering. Topics include but are not limited to:

- Machine learning and its application in automotive systems;
- Modeling, simulation, and control of automotive systems inspired by machine learning or AI;
- Advanced sensing and actuation via machine learning;
- Controls based on reinforcement learning;
- Connected and automated vehicles;
- Predictive maintenance;
- Advanced driver assistance systems;
- Human–machine interface.

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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