Applications of Machine Learning in Automotive Engineering

Guest Editor:

Dr. Hwan-Sik Yoon
Department of Mechanical
Engineering, The University of
Alabama, Box 870276,
Tuscaloosa, AL 35487-0276, USA

Deadline for manuscript
submissions:
25 September 2024

Message from the Guest Editor

Dear Colleagues,

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.

Special Issue

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

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.

Author Benefits

Open Access : free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us