

Call for Papers

Feature Topic on Human-like Smart Autonomous Driving for Intelligent Vehicles and Transportation Systems

Drivers are the center of vehicles and transportation systems. Because of the rapid development of advanced technologies, artificial drivers have been developed as a key element in vehicles and transportation systems. The inconsistency between human drivers and artificial drivers will lead to accidents and congestions. To make future vehicles and transportation systems trustworthy in driving safety and acceptable in travel efficiency, developing technologies based on human drivers' reliable knowledge and cognitive intelligence together with smart operations is an essential and promising solution. However, there are many challenges to be addressed including the learning of smart human perception, reliable smart inference strategies in decision-making, adaptive correction of inappropriate driving operation, knowledge mapping, and enhancement of smart human driving in various scenarios.

To alleviate these challenges, emerging technologies inspiring by human intelligence (e.g., self-supervised learning, reinforcement learning, game theory) have been extensively developed in the related communities. This feature topic aims to provide a platform for researchers, engineers, and policymakers to share their latest innovative ideas and contributions in developing and applying these novel technologies to address the challenges concerning human-like smart autonomous driving in intelligent vehicles and transportation systems. The potential topics of interest include, but are not limited to:

- Smart environment perception for object detection and tracking based on sensor technologies
- Reliable risk assessment for context-aware mapping in various driving scenarios
- Decision-making with smart human intelligence for collision avoidance and maneuver strategies (e.g., lane change)
- Cooperative driving among human drivers and artificial drivers
- Interference strategies on inappropriate behaviors of human drivers or artificial drivers

Important Dates

2022.03.31: Deadline for Initial Paper Submission2022.05.31: Notification of First Round Decision2022.07.15: Deadline for Revised Paper Submission

2022.08.15: Final Decision Due **2022.09.01:** Final Manuscript Due

Guest Editors

Dr. Guofa Li, Associate Research Professor, Shenzhen University, China

Dr. Cristina Olaverri-Monreal, Professor, Johannes Kepler University Linz, Austria

Dr. Houxiang Zhang, Professor, Norwegian University of Science and Technology, Norway

Dr. Keqiang Li, Professor, Tsinghua University, China

Dr. Paul Green, Professor, University of Michigan, USA





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Submission Guidelines

The paper submission & review process will be handled through Automotive Innovation

- 1. Please submit online via www.springer.com/42154, be sure to select Topical Collection: Human-like Smart Autonomous Driving for Intelligent Vehicles and Transportation Systems.
- 2. Papers should be submitted in two separate .doc files: 1) Blinded Manuscript (paper title, abstract, keywords, and full text); 2) Title Page (paper title, author affiliation, acknowledgment, and any other information related to the authors' identification).
- 3. All manuscripts will be peer-reviewed and evaluated based on quality, originality, novelty, and relevance to the topics.
- 4. If any problems, please feel free to contact the journal editorial office via email: jai-editor@sae-china.org.



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The journal provides a forum for the research of principles, methodologies, designs, theoretical background, and cutting-edge technologies in connection with the development of vehicle and mobility. The main topics cover: energy-saving, electrification, intelligent and connected, safety, and emerging vehicle technologies.

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Contact

Ms. Lili Lu

Tel:+86-10-50950036

E-mail: jai-editor@sae-china.org