

Science China Information Sciences: Call for Paper

Special Focus on Driver Automation Collaboration and Augmentation in Automated Driving

Automated driving is expected to improve road transportation systems to be more intelligent, more efficient, and safer. However, in the coming few decades, automated-driving vehicles will be required to cooperate with human drivers either within the vehicles (e.g. levels 2 and 3) or of surrounding human-driven vehicles. The investigation of driver automation collaboration and augmentation is thus essential to ensure driving safety and enhance traffic efficiency. By understanding and predicting drivers' behaviors of surrounding human-driven vehicles, automated-driving vehicles can decide proper driving strategies to cooperate with the adjacent road users. As to the drivers inside the intelligent vehicles, the driver automation collaboration can gain the drivers' trust and usage of the automated driving by meeting the drivers' expectation. This special focus calls for novel contributions and new progress on integrating human drivers and automated driving together, particularly driver automation collaboration. On the basis of advanced driver-vehicle interactions, human-automation augmentation will further improve the human-vehicle system performance by exploiting their strength. The main purpose of this special focus is to publish the state-of-the-art solutions, challenges, and applications of driver automation collaboration and augmentation in automated driving, including but not limited to:

- Understanding and prediction of driver behaviors in automated driving
- Driver behaviors in critical driving scenarios
- Driver automation collaboration within the same vehicle
- Autonomous driving decision making and planning in consideration of surrounding human-driven vehicles
- Driver automation augmentation for safe driving
- Cognitive autonomous driving
- New features development in driver automation collaboration and augmentation
- Road testing and verification of driver automation collaboration in automated driving

Submission:

The papers should be edited in the SCIS template, and should be submitted online through the manuscript submission system of SCIENCE CHINA Information Sciences (**Impact Factor: 2.731**). The submission website is: <https://mc03.manuscriptcentral.com/scis>. You should choose **Special Focus on Driver Automation Collaboration and Augmentation in Automated Driving**. Information and guidelines on preparation of manuscripts are available on the journal website: <http://scis.scichina.com>.

Important Dates:

Manuscript submission deadline: **December 1, 2019**

Revision notification: March 1, 2020

Final manuscripts due: April 15, 2020

Publication: September 1, 2020

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