Call for Papers

Special Issue on
Security and Safety in Intelligent Connected Vehicle

Guest Editors:

- Xinsheng Ji, Digital Switching System Engineering & Technological R&D Center, China
- Yan Li, Qualcomm Technologies, Inc., China
- Shichun Yang, Beihang University, China
- Yufeng Li, Shanghai University, China

Submission deadline – 30th December 2024
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Special Issue on  
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Background

The intelligent connected vehicle realizes the deep coupling between the traditional closed automobile world and the Internet space. The information of the vehicle, road, person, sky and cloud is connected to the Internet space through the Internet, with the help of the Internet, the remote scheduling, control, update and other functions of the automobile has become an important trend in the future. Compared to the traditional Internet, intelligent Internet-connected vehicle is a heterogeneous, integrated, mobile and widely distributed Internet of Things system which integrates intelligent Internet-connected vehicle, traffic side equipment, wireless communication, satellite navigation, mobile terminal, Internet cloud platform, etc., the security threats it faces are more complex and diverse, bringing new challenges to industry and academia.

Aims and Scope of the Special Issue

As the world's first innovative journal focusing on the integration of network security and functional safety, Security and Safety (S&S) has initiated a special issue on “Security and Safety in Intelligent Connected Vehicle”, aiming to provide a platform for the global academic and industrial community to discuss the security and safety issues in the context of vehicle networking, including new models, new technologies and new strategies. All submissions will undergo a single-blind review by the editor and at least three independent reviewers, and acceptance will be based on the quality and relevance to the journal.

This special issue covers (but not be limited to) the following topics:

• Autonomous cooperative driving  
• Integrated analysis of vehicle safety and security  
• Integrated guarantee of vehicle safety and security  
• Vehicle safety communications  
• Safety and security of end-to-end autonomous driving  
• Vehicle safety and security monitoring system  
• Vehicle-related malware/firmware analysis  
• Safety and security of vehicle over-the-air updates  
• Threat analysis and risk assessment over-the-air updates for an autonomous vehicle  
• Safety and security of domain controller  
• Safety and security of vehicle-to-everything (V2X) communications  
• Vehicle-Road-Cloud Cooperation security  
• Risk assessment of road safety and security based on vehicle-road-cloud integration  
• Intra- and inter-vehicle network (e.g., CAN bus, V2X, remote operator channel) security  
• Multi-vehicle coordination/cooperation security  
• VANETs security and privacy protection

Submissions

Authors should submit their manuscripts online directly at: https://sands.nestor-edp.org and choose, during submission, the special issue: Security and Safety in Intelligent Connected Vehicle. All relevant papers will be carefully considered and peer-reviewed by a distinguished team of international experts. The instructions for authors are detailed at: https://sands.edp SCIENCES.org/author-information/instructions-for-authors.

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Article Processing Charges - S&S is an Open Access journal and no APCs in 2024.

Guest Editors

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Guest Editor Biographies

Xinsheng Ji is currently the Chief Engineer of China National Digital Switching System Engineering and Technological R&D Center (NDSC) and Purple Mountain Laboratory. He is an expert of National 6G Technology Group, the Chief Scientist of wireless security direction of the Center for Wireless Communication Synergy Innovation, the Deputy Director of the research center of Mobile Internet Security Technology and also the Principal Investigator of National Natural Science Foundation of China Innovation Research Group. He has won three State Science and Technology Prizes Awards and the State Science and Technology Prizes Innovation Team Award. His research interests include 5G/6G security and cyber resilience. He now severs as an Associate Editor-in-Chief of Security and Safety.

Yan Li is Vice President of Technical Standards in Qualcomm Technologies. He has been responsible for standardization works in China since he joined Qualcomm in 2002. He represents Qualcomm in FuTURE Forum board and is the chair of FuTURE Forum and TIIA Internet of Vehicle Joint Working Group. He is also the member of the National Communication Standardization Technical Committee (TC485) and a member of the editorial board of "Journal of Communications". His research interests include mobile communication system, modulation and coding techniques, synchronization techniques, mobile applications and V2X. He had published more than 10 papers on key domestic and international publications and wrote the book “5G and Connected Vehicle”. He also owned 16 granted US patents. He now severs as an Associate Editor of Security and Safety.

Shichun Yang is Dean of School of Transportation Science and Engineering from Beihang University, and has majored in the safety control of intelligent networked new energy vehicles for decades. He is the fellow of Chinese Society of Automotive Engineering and the chairman of the CSAE Intelligent Networked Vehicle Safety Committee. He has won State Science and Technology Prizes Awards, China Society of Automotive Engineering Science and Technology Special Award and other ten awards. His academic research has been published in Matter, eTranpostation, Automotive Innovation, and other high-quality journals. Recently, he has published more than 160 articles with 2500 citations, and H-index is 31. He now severs as an Associate Editor-in-Chief of Chain.

Yufeng Li is a professor and doctoral advisor at Shanghai University, specializes in research on the Internet of Vehicles (IoV) and cybersecurity for Connected Automated Vehicles (CAVs). He currently serves as the academic leader for IoV security at Purple Mountain Laboratories, the director of the Collaborative Innovation Center for Connected Automated Vehicle Cybersecurity in Shanghai, the director of the Key Laboratory for Connected Automated Vehicle Cybersecurity in Shanghai, and the deputy director of the CAVs security committee of the China Society of Automotive Engineers.