

# Letter from the Co-editors

## Welcome to the Special Issue on escar (Embedded Security in Cars) USA 2020!

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The last few months have been unprecedented times due to COVID-19, and we had to make the painful decision to cancel the escar USA 2020 workshop after we had already received many submissions. Although we strongly felt that the articles submitted provide much value to our community, escar USA has never had formal proceedings, and we did not have an established process to publish articles. As a result, we started a discussion with the authors and the escar USA Program Committee to perform a peer-review process that would allow us to publish accepted articles in a journal-style format. The Society of Automotive Engineers (SAE) International was immediately on board and willing to publish the accepted escar USA 2020 articles as a special issue of the *SAE International Journal of Transportation Cybersecurity and Privacy*. The issue in your hands is the result, and it is also the first formal publication of accepted escar USA articles.

The escar series of conferences started more than a decade ago as a small specialized workshop, first held in Germany in 2003. In 2013, the series expanded when escar USA was held for the first time, and 1 year later escar Asia was launched in Japan. Today, the escar series is a global fixture in the automotive cybersecurity community. That community has grown rapidly in the United States within the past few years, and this is reflected by escar USA's success with approximately 300 attendees in 2019. Our priority is to bring together industry, academia, and government to secure current and future vehicles, and we hope that this special issue will reach even more of you.

We are most thankful to all authors who submitted to escar USA this year. We know that it takes an incredible amount of time and energy to produce good results, and we wouldn't have this special issue without your efforts. We originally received 32 conference submissions, of which 19 author teams resubmitted their work in a journal-style format for consideration for this special issue. Each article was peer reviewed by at least three reviewers, and articles that were co-authored by a steering committee member were reviewed by at least five reviewers. We accepted 8 of the 19 articles for publication, and we are happy to see that the community continues to generate excellent quality submissions. Selecting the articles for the journal was not an easy task, and we regret that some strong submissions could not be accepted.

### History

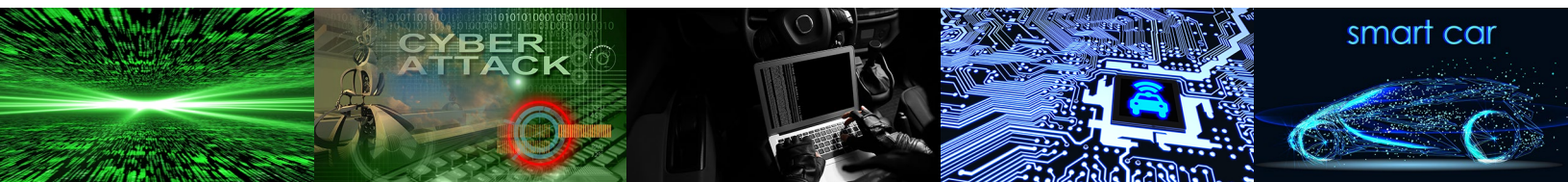
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As in the past, some of the most exciting developments in automotive security are being discussed in this special issue. We have a good mixture of articles around security technology, testing, governance, and standards. The topics include a comprehensive analysis of secure boot implementations in vehicles, protecting the OBD-II port, increasing privacy in vehicle-to-everything (V2X) communication networks, and secure updates of vehicles by means of public-key cryptography. Furthermore, you will read about vehicle security laws from a Japanese perspective; about a strategy to specify comprehensive security standards while enabling interoperability, which uses the Uptane standard for security of firmware over-the-air updates as an example; and about the V2X communications security standard in China. Finally, you will learn about fuzz testing of virtualized ECUs. We encourage you to follow up with the authors and start a discussion to further advance our community knowledge.

We are deeply indebted to the following escar USA Program Committee members who found time in their busy schedules to evaluate the submissions and improve the final article versions with their invaluable feedback:

Ansaf Alrabady, Fiat Chrysler Automobiles	Liron Kaneti, Argus Cyber Security
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We hope that all of you are safe and healthy, and we look forward to seeing you again at next year's escar USA!

escar USA Steering Committee

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Find the online special issue [here](#).

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