

9th escar USA – Embedded Security in Cars Conference

June 15 - 16, 2022, Ypsilanti, Michigan (Detroit)

Important Dates

Submission deadline:

~~February 21, 2022~~ March 2, 2022

Acceptance notification:

April 11, 2022

Final paper/presentation slides due:

May 23, 2022

Steering Committee

Thomas Forest, General Motors, tom.m.forest@gm.com
 Kevin Harnett, DOT/VOLPE, kevin.harnett@dot.gov
 Rob Lambert, ESCRYPT, robert.lambert@escrypt.com
 Stephen McFarland, Toyota, stephen.mcfarland@toyota.com

Program Committee

Ansaf Alrabady, Stellantis
 Matthew Bourdua, Motional
 Benedikt Brecht, Volkswagen AG
 Justin Cappos, New York University
 Matthew Carpenter, Grimm
 Sergio Casadei, Volkswagen AG
 Qi Alfred Chen, University of California, Irvine
 Jeremy Daily, Colorado State University
 Andy Davis, NCC Group
 Martin Emele, Robert Bosch
 Michael Feiri, ZF TRW
 Sebastian Fischmeister, University of Waterloo
 Jorge Guajardo Merchan, Robert Bosch LLC
 Karl Heimer, Heimer & Associates
 Kevin Henry, NCC Group
 Markus Ihle, ETAS
 Di Jin, General Motors
 Urban Jonson, National Motor Freight Traffic Association
 Mark Klausner, Toyota Motors North America
 John Krzeszewski, Eaton
 Suzanne Lightman, NIST
 Bill Mazzara, Stellantis
 Ira McDonald, High North
 Dave New, Stellantis
 Aleksey Nogin, HRL Laboratories
 Hisashi Oguma, Toyota InfoTechnology Center
 David Oswald, University of Birmingham
 Christos Papadopoulos, University of Memphis
 Jonathan Petit, Qualcomm
 Alan Tatourian, Intel
 Eric Thayer, Assured Information Security
 Alexander Tschache, Volkswagen AG
 André Weimerskirch, Lear Corporation
 Michael Westra, Ford Motor Company
 Lars Wolleschensky, Lear Corporation

Program and Registration Information

Complete program and registration information will be available at <https://www.escar.info/escar-usa.html>

Overview and Topics

Modern automobiles are complex cyberphysical systems, interacting with their passengers, the environment, infrastructure, and each other in rich and subtle ways. Nearly every system in a modern vehicle is computerized, and the complexity and degree of interaction of these systems is increasing dramatically. The automotive ecosystem is incredibly complex with deep supply chains and a complex regulatory environment. Automotive cybersecurity is a crucial, many-faceted topic that has aspects in common with traditional IT security but also has many automotive-specific elements.

The escar conference series, held annually in Europe, the USA, and Asia, has established itself as a premier forum for information, discussion and exchange of ideas related to vehicle cybersecurity. As in previous years, the program will include invited talks, but we also invite the submission of papers and presentations on all aspects of automotive cybersecurity, including but not limited to the following areas:

- Cybersecurity-related engineering, software assurance, development & validation, and security standardization
- Design of security-resilient vehicle architectures and applications
- Privacy and data protection issues in vehicular settings
- Vehicular hardware security and hardware security modules
- Security of vehicular communications (on-board, passenger, and V2X)
- Vehicle cyber intrusion detection systems and vehicle forensics
- Security of automotive cloud-based infrastructure
- Security of vehicle theft prevention and theft response solutions
- Vehicle-related fraud and data tampering (odometer, warranty fraud, etc.)
- Security of vehicular rights control and audit (e.g., feature activation)
- Security of autonomous vehicles including sensing, control, and planning
- Security of vehicular Position, Navigation, and Timing
- Security of automotive diagnosis, maintenance, and software update
- Security implications of AI used in a vehicle context
- Electric vehicle charging security, including interactions with the power grid
- Cybersecurity of commercial vehicles
- Automotive reverse engineering and penetration testing
- Legal, liability, and regulatory aspects of automotive cybersecurity

Instructions for Paper Submission

Theoretical/scientific articles, case studies and descriptions of real-world experience are welcome. All submissions will be double-blind peer-reviewed. Two types of submissions will be accepted:

Full papers of up to 15 pages: This can be, for example, new research results, case studies, or state-of-the-art reports. The value to the escar community should be clearly demonstrated.

Extended abstracts of 3 or more full pages: This category is geared towards contributions from industry and government. These will consist of a presentation only - no full paper will be required. The abstract must be at least 3 full pages and should clearly outline the content of the planned presentation and its value to the escar community.

Important Note 1: Extended abstracts of less than 3 full single-spaced pages will be rejected without review. Marketing driven submissions and submissions that lack details to enable a review were not well received and almost always rejected in the past.

Important Note 2: For both submission types the text must be in English with a font size of at least 10pt. **Submissions must be anonymous with no identifying features on the submissions (such as obvious references).**

Important Note 3: Please ensure that you will be able to provide the final presentation slides by the deadline listed above.

Submissions must be in PDF format and will be accepted at escar's submission site: <https://easychair.org/conferences/?conf=escarusa2022>