

21st escar Europe | November 15 to 16, 2023 | Hamburg, Germany



Call for Papers – escar Europe 2023

Overview and Topics

Information technology is the driving force behind most innovations in the automotive industry. Today, even compact vehicles have a few tens of interconnected microprocessors with up to several hundred megabytes of software and integrated communication capabilities to the outside world. The situation is similar for commercial vehicles such as trucks and offhighway vehicles.

One crucial aspect of many IT applications in vehicles is IT security. Whereas IT safety is a relatively well established (if not necessarily well understood) field, the protection of automotive IT systems against manipulations has more recently started to emerge. At the same time, security will be an enabling technology for many – perhaps for most – future automotive IT applications. IT security will increase both, reliability and safety, while enabling and protecting various new business models.

The escar conference has established itself as the premier forum for information, discussion and exchange of ideas between academia and industry in this innovative field. As in previous years, the program will include invited talks and submitted papers in the following security related areas.

- Security in Software-Defined Vehicle and eco systems, incl changing value chains, continuous development, DevOps, application of new technologies
- Cyber Security Management System, incl. regulation, standardization, certification, interoperability, connection to other management systems, UN R155, ISO/SAE21434
- Offensive Security, e.g., car hacking, penetration testing, protocol analysis, automation, fuzzing, etc.
- Architectures for securing new applications, like highly-automated and autonomous vehicles, electric vehicles, big data in automotive, backend- and cloud-infrastructures, domain controller, vehicle computer, etc.
- Security engineering, safety & security co-design, trust models & formal methods, development & validation tools, security (long term) maintenance, security (credential and overall) management, incident handling and response, and security economics for automotive domain, etc.
- Future security technologies and their application to automotive systems, e.g., distributed ledger technology, AI, post-quantum cryptography, Trusted Execution Environments, etc.



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- Security technologies for systems and subsystems, automotive ECUs and subcomponents, networks, and applications, e.g., hardware security, OTA, in-vehicle and V2X network security, access control, intrusion detection, monitoring, automotive SIEM, security functions, etc.
- Further automotive- and security-related topics such as security usability, legal aspects, privacy and data protection, security for other transport systems like railway or aerospace, etc.

Instructions for Paper Submission

Theoretical/scientific articles, case studies and descriptions of real-world experience are welcome. All submissions will be peer-reviewed. Prospective authors should contact one of the steering committee members in case they have a doubt about the appropriateness of their submission for the conference. Two types of submissions are possible.

Scientific track: full papers of up to 15 pages

This can be, for example, new research results, case studies, or state-of-the-art reports. These paper will undergo a full peer-review and will be included in the proceedings of escar and have a citable DOI. The value to the escar community should be clearly demonstrated.

Industrial track: extended abstracts of 3 – 4 full pages

This category is geared towards contributions from industry and government. These will consist of 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. Abstracts should be content-focused and mere product or company presentations are discouraged. Abstracts will be part of the proceedings handed out at the conference, but will not be part of the online-proceedings and will not have a DOI.

Important Notes

Important Note 1: Extended abstracts of less than 3 full 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 10 pt. Submissions must be **anonymous with no identifying features** on the submissions (such as obvious references).

Important Note 3: All submissions must use the template provided on the website. Templates are available either in Word or LaTeX format.

Submissions must be in PDF format and will be accepted at escar's submission site:

<https://easychair.org/conferences/?conf=escareurope2023>

Important Dates

Submission deadline: June 1st, 2023

Acceptance notification: August 15th, 2023

Final paper/presentation slides due: September 15th, 2023

Contact



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