CALL FOR PRESENTATIONS

VDA Automotive SYS Conference 2025

Quality, Safety and Security for Automotive Software-Based Systems

June 25 - 27, 2025 – Germany (Location will be available soon)

From Industry to Industry

In June 2025, the 15th VDA Automotive SYS Conference hosted by the Association of the German Automotive Industry takes place near Berlin. Top-rated keynote speakers, experts and managers from various mechatronic development areas and leading service providers are going to share experience and knowledge.

Up to date with the changes in the development of embedded systems in the connected vehicle, the conference focuses on **Quality, Safety** and **Security** of modern vehicle electronics and their software. The conference will deal both with technical methods/solutions and management practices with respect to current and future, national and international automotive standards.

The conference is accepted by the international assessor certification scheme (intacs®) as active or passive experience evidence (EE-EP, EE-AC) for certification as Automotive SPICE Lead Assessor.

Call for Workshops and Presentations

The VDA Automotive SYS Program Committee appreciates your contribution either as a dedicated **3-hour workshop** or a **35 minutes presentation**.

To give you an indication of possible presentation subjects, a preliminary program structure with dedicated session topics is provided in the following section on page 2 and 3. Please note, that beside these proposals, any presentation addressing current or future challenges with respect to quality, safety or security for automotive software-based systems is welcome. **Please feel free to share this call for presentation within your organization.**

Alternately, a proposal for a workshop may be submitted for corresponding topics. For further information, please refer to the submission details on page 4.

Please provide any material to our OpenConf conference program website:

https://www.openconf.org/AutomotiveSYS2025/openconf.php

Important Deadlines

- Submission of draft presentation or paper: **January 31, 2025***
- Notification of acceptance: **March 10, 2025**
- Submission of presentation slides: **June 11, 2025**

**** No submissions can be accepted after this deadline.***

Benefits, terms and conditions for accepted presenters

- Presentations should be held by only one speaker. **Only the main speaker will get free entrance to the conference**.
- The number of presenters for workshops should not exceed 4 persons. The number of free tickets to the conference for workshop speakers is limited to 4.
- With registering your presentation in the conference program website you indicate your on-site availability for the given conference dates. The exact timeslot for your presentation/workshop requiring on-site attendance will be fixed after acceptance.
- You will get a speaker certificate as active or passive experience evidence for certification as intacs™ competent or principal assessor.
- The best presentation will be awarded based on the conference participant votes.

Session and Topic overview for the 2025 conference (most highly requested first):

Session Topic: Artificial intelligence and machine learning in automotive applications

Development, release and operation of neural network-based systems with respect to:

- AI as part of a software-based product
- AI for development support (e.g. in tools)
- Acceptance of such systems by users include use of case studies
- Current state and possible phases for introduction and end customer usage
- Possible additional challenges for road vehicle solutions compared to e.g. solutions for aerospace industry
- Legal frameworks, ethical aspects, global market differences
- New possible business cases and implication for automotive industry
- Safety and integrity argumentation for systems using machine learning / AI
- Machine learning process lifecycle

Session Topic: Cybersecurity in automotive applications

Security management / engineering with respect to:

- Assets/threats for the connected intelligent vehicle
- Ethernet networks in the vehicle
- Secure model-based development
- System/hardware-level security measures, secure architectures, embedded operating systems / AUTOSAR
- Technical aspects for cybersecurity assessments
- Threat Analysis and Risk Assessment in the automotive supply chain
- Multi-Layer security concepts
- Cloud Based Monitoring
- Security assurance levels – concepts and significance

Session Topic: Process assessment and improvements using Automotive SPICE or other models

Application of automotive process assessments with respect to:

- Application and experience reports of VDA Automotive SPICE guidelines 2.0
- Application and experience reports of model extensions (HWE / MLE / CS)
- Application and experience reports of potential analysis
- Highly distributed / agile / model-based developments
- Handling and coverage of and/or significance regarding safety and/or cybersecurity processes
- Efficiency in process assessments
- Process assessments for very small and medium enterprises

Session Topic: Software/System quality assurance for future automotive systems

Assure software/system quality with respect to:

- Distributed developments
- Addressing DevOps
- Covering highly networked systems
- Agile developments
- Over-the-air updates
- End to End QA strategies with respect to connected systems
- Characteristics of data used in networked vehicles
- Using of cloud services

Session Topic: Safety in automotive applications

Safety management / engineering with respect to:

- Safety release of automated driving systems
- Changes in legal frameworks
- Global differences and trends regarding public perception of safety
- Safety of over-the-air updates
- Safety Architectures (EGAS, ASICS etc.), multicore/manycore architectures
- Development approaches to achieve operational safety

Session Topic: Verification and validation

Verification and validation with respect to:

- Machine learning systems / Neural Networks
- Highly automated driving
- Behaviour based testing
- Field-data based and model-based verification or validation
- Highly configurable systems in vehicles and beyond
- Other related current and future topics

Session Topic: Technical Compliance in Automotive applications

Widening the vehicle centric view of standardization with respect to:

- Updates in regulation and standardization activities
- Challenges from and approaches to handle regulations/standards not specific to Automotive
- Challenges in achieving technical compliance in the supply chain
- With respect to standards such as ISO 26262, Automotive SPICE, IATF 16949, ISO/SAE 21434 (Cybersecurity), ISO 21448 (SOTIF), ISO PAS 5112, ISO 27001 or other related standards

Session Topic: Open source and cloud services

Open-source SW and cloud services:

- Open Source Software and cloud services in embedded and/or safety/security relevant systems
- Combining a service life-cycle with standards such as Automotive SPICE
- Applicability and interoperability of in-vehicle and cloud / IT security standards
- Ensuring quality for open-source based systems
- Need for conformity activities

Session Topic: Automated driving

Development of automated driving with respect to:

- Share of responsibilities between OEM, infrastructure or data providers, and/or suppliers etc.
- Changes in legal frameworks - global differences and trends.
- Global differences in ethics and perception of safety by users, the society, regulators, authorities and jurisdiction
- Contribution of HMI to safety concepts
- Integrity of vehicle external data and/or functionalities (Cloud, V2V etc …)

Session Topic: Product Safety / Integrity

Product safety / integrity / conformity management with respect to:

- Holistic product safety (covering, but not limited to, Functional safety, Safety of the intended functionality and Cybersecurity)
- Handling of compliance in terms of current and future vehicles
- Safety release of systems providing automated driving functions
- Product Safety process for intelligent connected vehicles and associated systems

Submission Details

Contributions must be original work which means that they must report previously unpublished work and not be submitted concurrently to another conference with refereed proceedings.

Please provide any submission including a title, target description and agenda of the presentation, the name(s) of the author(s) and a contact address of the author(s).

Preregistering an abstract of the presentation

The abstract must be in English language and uploaded through the conference program website. It is intended for first registration of the presentation.

Paper or Presentation draft

Please notice that the abstract is not sufficient for the programme committee to make an acceptance decision!

To enable the programme committee to judge which presentation will best meet the aims of the conference, you shall either submit a **paper** which

- shall at least have three pages in size excluding abstract, acknowledgements, and references
- shall describe all relevant topics and experiences in sufficient detail
- shall clearly describe the proposed solution / conclusion
- shall address the benefits from the solutions / conclusions to the community
- shall be free from tool / company advertisements

or

submit a **draft of your presentation** addressing the forenamed aspects.

Presentation

The presentation must be in English language and submitted in MS PowerPoint (ppt) or pdf format. It should be appropriate in length to fill a 35 minutes talk. You are requested to use your own presentation template for the conference.

Workshops

There will be workshops on the first and second day of the conference. When submitting, please mark whether your abstract is meant for a normal session presentation or for a workshop. Workshops should be a type of interactive training where participants carry out several training activities rather than passively listen to a lecture or presentation.

Acceptance decision by the programme committee

After review by the members of the programme committee, you will receive a notification, whether your submission has been accepted, accepted with modification or rejected. It is strongly recommended to consider the feedback given by the reviewers for your submission. The feedback is available as specific review comments in the conference system. In case a modification is requested, an updated proposal is necessary for a final acceptance statement.

Registration for presenters

Beside registering your presentation in the OpenConf portal, it is required for accepted presenters to register on the VDA QMC event homepage. With the notification of acceptance, you will receive a notification with a registration voucher code.

Other participant registration

If you want to attend the conference as a participant, sponsor or exhibitor you can register online using the registration forms available soon on QMC Events - Verband der Automobilindustrie e. V. (VDA) (vdaqmc.de)

Please address any inquiry for non-speakers directly to the VDA QMC conference team (events@vda-qmc.de).

Program Committee

- Sandro Antenori, Continental Automotive Technologies GmbH
  Supplier Quality Management, Member of VDA WG 13
- Fabio Bella, Kugler Maag Cie GmbH by UL
  Managing Consultant, Member Management Board Automotive SPIN Italy, Member of intacs™ Advisory Board
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  Group quality software
- Alec Dorling, Zenseact AB
  Automotive SPICE Coordinator, Convener ISO/IEC JTC1/SC7 WG10 (Process Assessment SPICE)
- Sabir Idrees, Robert Bosch GmbH
  Cybersecurity Expert, Member of DIN AK WG “Cybersecurity”, German delegate to ISO TC22/SC32/WG11
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- Matthias Maihöfer, Schaeffler Technologies AG & Co. KG
  Head of Functional Safety, Head of German delegation to ISO TC22/SCG32/WG8 (ISO 26262) and DIN AK 32-08-01/-02
- Pierre Metz, Forvia Hella
  Global Head of Development Quality Automated Driving, Head of Functional Safety, Member of VDA WG 13, German delegate to ISO TC22/SG3/WG8 and intacs™ Advisory board
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  Functional Safety Expert, Head of Austrian delegation to ISO TC22/SG3/WG8 (ISO 26262)
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