

eLSA Symposium '25

Open source software in safe and secure systems
Göttingen, September 25 - 26

Programme

Thursday - September 25, 2025

- 9:00 **Grab your Coffee & Registration**
9:30 **Welcome and Short Introduction**
- 10:00 **OSS in Safety-Critical Systems: From Doubt to Dependability? – Insights from Eclipse iceoryx**
Michael Pöhl - ekxide IO GmbH
- 10:30 **Code, Compliance, and Confusion: Open Source in Safety-Critical Products**
Philipp Ahmann - Etas GmbH (a Subsidiary of Robert Bosch GmbH)
- 11:00 **Coffee Break**
- 11:30 **Turning Open-Source Code into Safety-Grade Software via CI-Ready Static Analysis**
Roberto Bagnara, Ph. D. - BUGSENG and University of Parma
- 12:00 **Multicore Processors in Avionics: Implementation, Certification, and Use Case**
Matthias Lehmann - University of Stuttgart
- 12:30 **Xen Hypervisor for “Linux for Safety Applications” in Automotive High-Performance Computing on ARM64**
Muhammad Aqib Javaid Butt - Elektrobit Automotive GmbH
- 13:00 **Lunch**
- 14:00 **Fliewatüüt meets AI: Can We Trust AI Tools in Safety-Critical Development?**
Andreas Gasch, Flavia Povirnar - CARIAD SE
- 14:30 **Integrating Safety and Security: Automated Assurance Case Development for Safety-Critical Systems Using SMARAGD**
Roman Trentinaglia - Fraunhofer IEM, Institute for Mechatronic Systems Design
- 15:00 **Linux for Safety-Related Applications - Making it Possible to Build Safe and Secure Systems with Linux**
Federico Arrighetti, Simone Weiß - Elektrobit Automotive GmbH
- 15:30 **Coffee Break**
- 16:00 **Towards Open-Source Mixed-Criticality Systems - A Conceptual Framework Unifying Safety and Security**
Benedikt Spranger - Linutronix GmbH
- 16:30 **From Complexity to Clarity: Understanding your Software Product Health**
Jan-Niclas Strüwer - Fraunhofer IEM, Institute for Mechatronic Systems Design
- 17:00 **Keynote - Open Source and Functional Safety: Challenges and the Path Forward**
Rohitaswa Bhattacharya - NXP Semiconductors
- 17:30 **End of the Official Part**
18:30 **Get Together** at La Locanda DUE - Eden Hotel

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|-------|--|
| 09:00 | Grab your Coffee |
| 09:20 | Welcome |
| 09:30 | Tool & Library Qualification for Safe Linux
Dr. Oscar Slotosch - Validas AG |
| 10:00 | Using Open Source Compilers in Safety Critical Projects
Dr. Marcel Beemster - Solid Sands B.V. |
| 10:30 | Test your Binary not your Code: The Heisenberg Principle Meets Software Testing
Wolfgang Gehrhardt - emlix GmbH |
| 11:00 | Coffee Break |
| 11:30 | Bringing Functional Safety to the SBOM: An Introduction to the SPDX Safety Profile
Nicole Pappler - AlektoMetis |
| 12:00 | An STPA-based Approach to the Derivation of Verifiable Safety Requirements for General-Purpose Safety Elements out of Context
Jan Toennemann - Vector Informatik GmbH and University of Stuttgart |
| 12:30 | The Increasing Relevance of Open Source Software for the Digital Sovereignty of the European Union and Germany - and What does it Mean for the Development of Embedded Systems
Heike Jordan, Dr. Uwe Kracke - emlix GmbH |
| 13:00 | Lunch |
| 14:00 | Guided Tour
The University and its Mathematicians |