13th Scandinavian Conference on System and Software Safety

9 September, Stockholm



Systems, Software and Safety 2025

System and software safety in electronic systems is becoming increasingly central in many industries and indeed as part of often critical societal infrastructure. The systems become ever more complex, connected and autonomous — and the software continues to grow. This poses many challenges even for mature organizations, requiring approaches that go beyond established best practices.

The Scandinavian conference on safety critical systems and software has become a central meeting place for Scandinavian safety experts from industry, public and academic organizations. This year we run event as a workshop the first day of the international SafeComp 2025 conference in Stockholm. The workshop features one day with distinguished keynotes, industrial and research presentations. In the evening the SCSSS2025 Dinner is included in the price as the SafeComp Welcome Reception in the Stockholm City Hall. This will be an opportunity meet old friends and establish new contacts with all SafeComp participants. Warm welcome to the conference, this year in Stockholm.

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Time: 9 September 2024

Place: KTH, Stockholm

Organizers: Addalot Consulting AB, KTH and ICES part of SafeComp

Cost (excl. VAT): Early bird* Late EWICS members 2150:-3250:-Nonmembers 2750:-3350:-

Welcome reception, Stockholm City Hall, 19:00-21:00. Free - but preregistration required, latest August 9.

*Early bird price before July 14

Final registration: September 5

Full program and registration: http://safety.addalot.se/ https://safecomp2025.se/registration/





SafeComp2025

Monday 9 September

| Time | Content | Presenter |
|-------------|--|-----------------------------------|
| 08:45-09:20 | Registration and coffee | |
| 09:20-09:30 | Welcome and introduction | Organizers |
| 09:30-10:30 | Keynote: Assuring Safety in the Face of the | Mario Trapp, Fraunhofer |
| 10:30-10:45 | Coffee | |
| 10:45-11:20 | Overview on System Safety Standards and Practices for ICVs and NEVs in China: A different approach | William Zeng, Roben Automotive |
| 11:20-11:55 | Embracing Change: LLM Use in Safety Engineering | Michael Wagner, ECR.AI |
| 11:55-12:55 | Lunch | |
| 12:55-13:55 | Keynote: Interaction between technical and social | Hans Liwång, |
| | system for the defense and security | KTH/Försvarshögskolan |
| 13:55-14:30 | AI Safety Assurance in the Automotive Domain - Standards Mapping and Application for an AI-Based SoC Estimation Function | Fredrik Warg; RISE |
| 14:30-15:05 | AI-enabled DevSafeOps for Autonomous Driving Software | Ali Nouri, Volvo Cars |
| 15:05-15:25 | Coffee | |
| 15:25-16:00 | Countering wildfire risk with AI-enabled sensor platforms | Filip Strand,KTH |
| 16:00-16:35 | Adapting ISO 21448 SOTIF for Mobile Machinery: A Forestry Automation Case Study | Aria Mirzai, RISE |
| 19:00-21:00 | Welcome reception | Stockholm City Hall |



Keynote summaries:

Assuring Safety in the Face of the Unpredictable, Mario Trapp, Fraunhofer Venturing into the world of autonomous systems, this talk explores the intricacies and challenges of assuring safety in a realm where, as 19th-century philosopher William James put it, "the world is a blooming, buzzing confusion." The spotlight is on learningenabled systems, a domain facing urgent safety challenges in our rapidly advancing technological landscape. The presentation revisits the concept of resilience, opening up a vital discussion on the necessity of safety in the face of unpredictability. It lays out the current challenges with a keen eye on the complex balance between system utility and safety. Potential solutions are proposed, providing thought-provoking insights into how we can enable these systems to adapt themselves to diverse contexts without compromising their safety. This talk takes you on a journey into the heart of selfadapting, resilient systems, exploring their complexities, their potential, and their critical role in our future. It's a riveting exploration of a new generation of systems that continuously adapt to meet the unpredictable challenges of the world around them. Based on pertinent examples and current research, this talk not only delves into the dynamics of learning-enabled systems and their safety assurance but also underscores the challenges that remain to be addressed, thereby shedding light on these systems' promising future potential.

Interaction between technical and social system for the defense and security, Hans Liwång, KTH/Försvarshögskolan

The research interest is primarily the interaction between technical and social systems for defense and security. The research draws on two fields, one dealing with risk and risk-based decision-making and the other dealing with the development of safety and security in relation to infrastructure in general and specifically shipping. The research therefore includes areas such as socio-technical systems perspectives, risk management, operations analysis, maritime safety and security, sustainability, risk management, risk understanding and risk communication.





