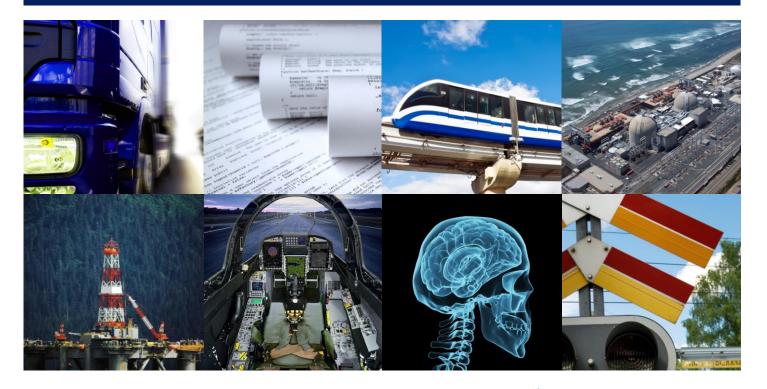
11th Scandinavian Conference on System and Software Safety 21-22 November, Stockholm



Systems, Software and Safety 2023

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. It is an opportunity to share experiences and make new contacts. The conference features a one and a half day with distinguished keynotes, industrial and research presentations, followed by seminar/tutorial by Nancy Leveson the second day. In the evening of the first day there is a conference dinner to meet old friends and establish new contacts.

Warm welcome to the conference, this year in Stockholm.

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Time: 21-22 November 2023

Place: KTH, Teknikringen 1 (Tuesday) and Lustikulla, Liljeholmsvägen 8 (Wednesday) Stockholm

Organizers: Addalot Consulting AB, SAFER/Chalmers, KTH and ICES

Cost (excl. VAT): Early bird* Late Standard 1995:-2995:-

Social dinner 21/11: 550 :-

*Early bird price before October 6

Final registration: 15 November

Full program and registration:

http://safety.addalot.se/







Tuesday 21 November

| Time | Content | Presenter |
|-------------|---|--------------------------------|
| 09:30-10:15 | Registration and coffee | |
| 10:15-10:30 | Welcome and introduction | Organizers |
| 10:30-11:30 | Keynote: Assuring the ethics of AI and autonomous systems | Ibrahim Habli, York University |
| 11:30-12:05 | How to use out-of-distribution detection method to argue AI/ML-based components into a safety lifecycle and related safety argument | Murat Erdogan, Magna |
| 12:05-13:00 | Lunch | |
| 13:00-14:15 | Keynote: The Need for a new Paradigm in System | Nancy Leveson, MIT |
| | Safety Engineering | |
| 14:15-14:50 | Holistic approach for streamlined vehicle FuSa and CS | William Zeng, Roben |
| | engineering | Automotive |
| 14:50 | Tutorial part 1 | Nancy Leveson, MIT |
| 15:45-16:00 | Coffee | |
| 17:20 | Dinner | |



Wednesday 22 November

| Time | Content | Presenter |
|-------------|--|-----------------------------|
| 08:30-09:30 | Keynote: The future of System Safety – how to apply HTO (Human-Technology- Organization) | Lena Kecklund, MTO |
| 09:30-10:05 | Assurance of Software-Intensive Medical Devices: | Barbara Gallina, Mälardalen |
| | What About Mental Harm? | University |
| 10:05-10:25 | Coffee | |
| 10:25-11:00 | Collective Perception- Wild Animal Info Sharing | Zehra Adil, Magna |
| 11:00-11:35 | Analyses of the interplay between safety and security | Behrooz Sangchoolie, RISE |
| | attributes in connected computer systems | |
| 11:35-12:35 | Lunch | |
| 12:35-16:00 | Tutorial part 2 | Nancy Leveson, MIT |
| 14:20-14:35 | Coffee | |



Tutorial: An Introduction to STPA and CAST, Nancy Leveson, MIT

CAST is a new accident analysis method that helps to better understand why an accident occurred and how to prevent future accidents related to the same systemic factors. In contrast, STPA is a proactive tool that identifies scenarios leading to accidents before they occur. Information obtained to assist in preventing or mitigating losses. While there is not enough time to teach how to perform STPA and CAST in this tutorial, I will provide an introduction to them and enough information that you should be able to get started in applying these new safety engineering tools.

There will be provided a little "homework" question Tuesday to go over on Wednesday.



