36. SafeTRANS Industrial Day

in cooperation with

Hochschule für Technik und Wissenschaft, Berlin

Topic

Chances and Risks of AI supported Critical Systems Design and Engineering

Objective of Workshop

The use of Artificial Intelligence (AI) in the development of safety-critical systems poses fundamental challenges for industry and research alike. On the one hand, the application of AI-based methods in virtually all phases of systems engineering promises enormous productivity gains, leading to faster system development, shorter time-to-market, and cost reductions through the elimination of (expensive) human labour. On the other hand, particularly for safety-related system components, questions of quality assurance, suitable testing procedures, integration into the safety case, and – not least – whether AI can generate new, creative and innovative approaches in systems engineering at all without human assistance, remain largely unanswered.

Call for Participation/Presentations

The 36th SafeTRANS Industrial Day therefore addresses usage of AI-based methods in design and systems engineering for safety-related systems. Topics include, among others:

- AI-based methods in Requirements Engineering, Architecture Exploration, HW/SW Co-Design, Software Engineering, Testing, Deployment, Run-Time Monitoring, ...
- AI-based methods in DevOps, CI/CD, agile and other “modern” engineering approaches.
- AI-based methods in safety architectures and for safety assurance.

- Training and learning approaches for AI-supported systems engineering.
- Development environments and engineering frameworks that support the use of AI-based methods.
- From tool qualification and tool confidence levels to tool certification: Quality measures for AI-based tools in the engineering process?
- Human-machine teaming and human-machine interfaces for AI-based methods in systems engineering.
- ...

We encourage contributions on the use of such methods to be supplemented by statements on the advantages and disadvantages compared to a „traditional approach“, and, where possible, also by open (research) questions addressing potential disadvantages.

Contributions about the use of AI-based methods within the systems under development are not the focus, unless the emphasis of the contribution lies in the AI-supported development of such systems.

Please submit speaker, title and abstract (ca. ½ -1 page) of your presentation by 24th April 2026 to katja.bonhagen@safetrans-de.org. Selection and notification of acceptance will be done by 4th May 2026.

Workshop language

The workshop languages are English and German. Typically, slides will be in English, while speakers speak German or English, depending on the audience and their preferences.

Date and Venue

Date: 07.07.2026, 09:00 - 17:00.

Venue: HTW, Campus Wilhelminenhof, 12459 Berlin

Webseite: https://www.safetrans-de.org