



Call for Participation – WS04

Time-Sensitive Networks from academia to industry: trends and challenges beyond the hype

Organizers and Chairs

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FOCUS. Time-Sensitive Networking (TSN) is a very significant evolution for the real-time network community, that raises a large amount of usage opportunities and challenges. The academic community is very active, and a lot of sub-problems are addressed in conferences and journal papers. The industrial community is also very active, still updating standards, implementing HW/SW solutions, and building new architectures on top of TSN components.

This workshop aims at gathering industrial and academic community to exchange on global trends and upcoming challenges.

This is an opportunity to get the experience of invited speakers. It also aims at provoking discussions between attendees.

Note that a special session on [Exploring the limits of TSN](#) is also organized at ETFA.

TOPICS

- ❖ Industry feedback on TSN usage
- ❖ Overview of TSN-related research
- ❖ TSN open questions
- ❖ TSN emerging challenges

AIM

The ETFA 2024 conference brings together professionals from industry and academia to share cutting-edge concepts, recent developments, research results, and practical achievements in industrial and factory automation. The key goal is to foster the enhancement and application of scientific techniques, models, and tools that support the efficient design and operation of industrial and factory automation systems.

WORKSHOP FORMAT

Half day (morning) Workshop, based on invited presentations.

This Workshop will include 5 presentations from academia and 3 from industry. Each presentation will be allocated a 30-minute timeslot, including time for question. Registration fees are waived for workshop organizers and presenters. However, please note that the payment of conference registration is required for organizers and speakers who intend to attend the main conference.

For any detail regarding registration to the Workshop, please refer to the Call for Workshops as well as the ETFA 2024 website.

WORKSHOP PRESENTERS

- ❖ Quentin Bailleul, IRT Saint Exupery
 - *TSN for critical systems: feedback from the multi-industry project EDEN*
- ❖ Jörn Migge, RealTime-at-Work
 - *Ten years of supporting customers in TSN configuration*
- ❖ Alexander Damisch, TTTech,
 - *TSN beyond the hype-cycle. Challenging Software Defined Networking use cases in the OT space*
- ❖ Thomas Stüberame, Tübingen University
 - *Traffic Scheduling with the TAS: Past Research and Future Directions*
- ❖ Mohammad Ashjaei,
 - *Advancing TSN Modeling and Analysis to Software and System Development Abstraction"*
- ❖ Luxi Zhao, Beihang University
 - *Challenges of Deadline-Aware Configurations for Hybrid TSN Networks*
- ❖ Lisa Maile, TU Braunschweig
 - *Decentralized Resource Reservation for Real-Time Communication in TSN*
- ❖ Marc Boyer, ONERA
 - *PSFP: opportunities, limits and open questions*