

Call for Papers

Track 11 - Vehicular Embedded Systems

Track chairs

Saad Mubeen §, Ramez Daoud ◆

§ Mälardalen University, Sweden, saad.mubeen@mdh.se

◆ SEAD Group, American University in Cairo, Egypt,
rdaoud@aucegypt.edu

❖ **FOCUS.** The track targets the challenges related to modeling, development, timing analysis, reuse, certification, deployment and execution of embedded systems in contemporary vehicles, as well as in the next generation of automated and connected vehicles.

❖ TOPICS

- ❖ Model- and component-based development of vehicular embedded systems
- ❖ Models and languages for vehicle software development, e.g., EAST-ADL and AUTOSAR
- ❖ In-vehicle communication protocols, e.g., CAN, CAN/FD, Automotive Ethernet, TSN
- ❖ Advanced computing platforms for vehicular systems, e.g., multi-core
- ❖ Support for timing predictability in vehicular embedded systems
- ❖ Safety, security and certification (e.g., ISO 26262) aspects in vehicular embedded systems
- ❖ Performance assessment, fault-tolerance and reliability issues in vehicular embedded systems
- ❖ Autonomous vehicles, advanced driver assistance systems, V2X communications
- ❖ Blended wired and wireless predictable communication in vehicular embedded systems
- ❖ Tool support, benchmarking and industrial case studies for vehicular embedded systems

❖ **AIM.** The aim of the conference is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the newly emerging areas of technology, as well as actual and potential applications to industrial and factory automation.

❖ **CONFERENCE FORMAT.** The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

❖ AUTHOR'S SCHEDULE (2022)

❖ Regular and special sessions papers

Submission deadline April 1
Acceptance notification May 6
Deadline for final manuscripts June 17

❖ Work-in-progress/Industry practice papers

Submission deadline May 13
Acceptance notification June 10
Deadline for final manuscripts June 17

Track Program Committee

- ❖ Petru Eles, *Linköping University, Sweden*
- ❖ Reinder Bril, *Technical University of Eindhoven, The Netherlands*
- ❖ Mikael Sjödin, *Mälardalen University, Sweden*
- ❖ Julio Medina, *Universidad de Cantabria, Spain*
- ❖ Sara Afshar, *Volvo Construction Equipment, Sweden*
- ❖ Paulo Garcia, *Carleton University, Canada*
- ❖ Matthias Becker, *KTH Royal Institute of Technology, Sweden*
- ❖ Dakshina Disari, *Robert Bosch, Germany*
- ❖ Roberto Cavicchioli, *University of Modena and Reggio Emilia, Italy*
- ❖ Aneta Vulgarakis Feljan, *Ericsson, Sweden*
- ❖ Alessandro Biondi, *Scuola Superiore Sant'Anna di Pisa, Italy*
- ❖ Marc Boyer, *ONERA, France*
- ❖ Alessio Bucaioni, *Mälardalen University, Sweden*
- ❖ Nicola Capodici, *University of Modena and Reggio Emilia, Italy*
- ❖ Aida Causevic, *Alstom, Sweden*
- ❖ Tommaso Cucinotta, *Scuola Superiore Sant'Anna di Pisa, Italy*
- ❖ Hossein Fotouhi, *Mälardalen University, Sweden*
- ❖ Marina Gutierrez Lopez, *TTTECH, Austria*
- ❖ Adam Kostrzewa, *Technical University of Braunschweig, Germany*
- ❖ Zdravko Krpić, *FERIT - J. J. Strausmayer University of Osijek, Croatia*
- ❖ Elena Lisova, *Volvo Construction Equipment, Sweden*
- ❖ Dina Mahmoud, *Ecole Polytechnique Federal de Lausanne, Switzerland*
- ❖ Claudio Maya, *CISTER - Porto, Portugal*
- ❖ Mitra Nasri, *Technical University of Eindhoven, The Netherlands*
- ❖ Alessandro Papadopoulos, *Mälardalen University, Sweden*
- ❖ Gaetano Patti, *University of Catania, Italy*
- ❖ Paul Pop, *DTU, Denmark*
- ❖ Tarek K. Refaat, *CISCO, Canada*
- ❖ Mehrdad Saadatmand, *RISE SICS, Sweden*
- ❖ Peter Ulbrich, *Technische Universität Dortmund, Germany*
- ❖ Gehad Alkady, *American University in Cairo, Egypt*
- ❖ Hassanein Amer, *American University in Cairo, Egypt*
- ❖ Nandinbaatar Tsog, *Unibap AB (publ.), Sweden*
- ❖ Fady Abouelgheit, *American University in Cairo, Egypt*
- ❖ Ihab Adly, *British University in Egypt, Egypt*
- ❖ Luxi Zhao, *Technical University of Munich, Germany*