21st Workshop on Automotive Software Engineering (ASE’24)

Stefan Kugele¹, Franz Wotawa²

Abstract: Software-driven systems are becoming pivotal, underpinning the majority of innovations in contemporary automobiles. This workshop is poised to explore a plethora of topics pertinent to automotive software development. Attendees will engage in discourse on the most apt methodologies, techniques, and tools essential for navigating the foremost challenges faced by researchers and practitioners in the field.

Keywords: Automotive; Software Engineering; Workshop

The 21st Workshop on Automotive Software Engineering (ASE’24) delves into the intricacies of automotive software development, highlighting pertinent methodologies, techniques, and tools relevant to this domain. As we witness an upsurge in connected vehicles, advanced driver-assistance systems, and the advent of fully automated driving, the significance of automotive software has never been more pronounced. Additionally, ensuring distraction-free and intuitive interaction with vehicle applications through multimodal interfaces has become paramount. Pioneering technologies like voice activation, cloud computing, and 5G connectivity are now integral to modern vehicles. These technological evolutions are reshaping the driving experience. Soon, prominent communication and social media platforms will seamlessly integrate into vehicles, facilitating user access during commutes. The primary objective of this workshop is to foster discussions and share insights on addressing prevailing challenges in automotive software engineering. This theme closely aligns with the broader Software Engineering (SE) conference, where ASE’24 is co-located. The workshop welcomes participation from researchers, developers, and practitioners in the automotive sector, as well as scholars from academic institutions focused on automotive software engineering. While the emphasis traditionally leans towards applied research over theoretical exploration, the commitment to excellence remains unwavering. To maintain the workshop’s standards, every paper submitted for this year underwent a rigorous review by at least three experts. We extend our heartfelt gratitude to all the reviewers for their exemplary dedication to the review process.

¹ Technische Hochschule Ingolstadt, AlMotion Bavaria, stefan.kugele@thi.de
² Institut für Softwaretechnologie, Technische Universität Graz, wotawa@ist.TUGraz.at

doi:10.18420/sw2024_55
Programme Committee

Prof. Dr. Marcel Baunach          Technische Universität Graz
Dr. Klaus Becker                 Continental Automotive Technologies GmbH
Prof. Dr. Lenz Belzner           Technische Hochschule Ingolstadt
Dr. Mirko Conrad                 samoconsult GmbH
Prof. Dr. Steffen Helke          Fachhochschule Südwestfalen
Prof. Dr. Paula Herber           Universität Münster
Prof. Dr. Thomas Kropf           Robert Bosch GmbH
apl. Prof. Dr. Wolfgang Müller   Uni Paderborn
Prof. Dr. Ralf Reißing           Hochschule Coburg
Prof. Dr. Eric Sax               Karlsruher Institut für Technologie / FZI
Prof. Dr. Jörn Schneider         Hochschule Trier
Prof. Dr. Ramin Tavakoli         Technische Hochschule Nürnberg
Prof. Dr. Thomas Vogel           Humboldt-Universität zu Berlin
Prof. Dr. Andreas Vogelsang      Universität Köln

Organization

Prof. Dr. Stefan Kugele          Technische Hochschule Ingolstadt
Prof. Dr. Franz Wotawa           Technische Universität Graz

For many years, this workshop has been organized by the GI interest group (Fachgruppe) on “Automotive Software Engineering”. The steering committee was consequently involved in the organization of this workshop as well.

3 https://fg-ase.gi.de