

20th Workshop on Automotive Software Engineering (ASE'23)

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Abstract: Software-based systems play an increasingly important role and enable most innovations in modern cars. This workshop will address various topics related to automotive software development. The participants will discuss appropriate methods, techniques, and tools needed to address the most current challenges for researchers and practitioners.

Keywords: Automotive; Software Engineering; Workshop

The 20th Workshop on Automotive Software Engineering (ASE'23) addresses the challenges of automotive software development and suitable methods, techniques, and tools for this area. With the increasing number of connected vehicles, modern driver assistance systems and the challenges of fully automated driving, automotive software is more critical today than ever. Furthermore, the distraction-free and intuitive operation of vehicle applications via multimodal interfaces play an increasingly important role. Again, innovative technologies such as voice control, cloud computing or 5G connectivity have found their way into the car. These technological advances have changed the driving experience: Soon, the most popular communication and social media services will be integrated into the vehicle and can then be operated by users while driving.

The workshop's primary goal is to exchange and discuss how current challenges in automotive software engineering can be mastered. The thematic focus offers many cross-references to the Software Engineering (SE) conference, to which the workshop is co-located. The workshop is aimed at researchers, developers, and users from the automotive industry, as well as scientists from research institutes and universities who deal with automotive software engineering. Traditionally, the focus is less on theory and more on applied research. To ensure that only high-quality papers are selected for publication and presentation, at least three reviewers were selected for each of the papers submitted to this year's workshop. Many thanks to all the reviewers who contributed with outstanding commitment to the review process.

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For many years, this workshop has been organized by the GI interest group (Fachgruppe) on “Automotive Software Engineering”.³ The steering committee was consequently involved in the organization of this workshop as well.

³ <https://fg-ase.gi.de>