The 16th Workshop on Automotive Software Engineering (ASE’19) addresses the challenges of software development in the automotive sector and consequently with suitable methods, techniques, and tools for this specific area. Nowadays, more than ever, software plays an important role in increasingly networked vehicles and modern driver assistance functions up to fully automatic driving.

An increasing complexity of the systems is accompanied by stricter requirements for reliability, security, safety, and data protection. More and more vehicle functions are realized by collaboration within the vehicle or even across vehicle boundaries. In addition, innovative technology like voice control, cloud computing, or 5G connectivity finds its way into the car. Driving is thus being changed by advancing “digital cultures”: People will soon be able to access services such as WhatsApp, Skype, or Facebook from their vehicles.

The main objectives of the workshop are the exchange and discussion of how current challenges in automotive software engineering can be mastered. The thematic orientation offers many cross-references to the Software Engineering (SE) conference to which the workshop is co-located. The workshop addresses researchers, developers, and users from the automotive industry as well as scientists from research institutes and universities working in the field of automotive software engineering. Traditionally, the focus is less on theory than on applied research.

Two reviewers were selected for each contribution submitted to this year’s workshop edition. Based on the reviews, we selected four papers for publication and presentation. Many thanks to all the reviewers who contributed with great commitment to the review process.

As in previous years, the workshop will be opened with a keynote speech. We would like to thank Prof. Dr. Matthias Tichy (Institute for Software Engineering and Programming Languages, University of Ulm), who agreed to give a keynote. In addition, this year there are three invited talks by Malte Mauritz (Fraunhofer ISST, Braunschweig), Benedikt Walter (Daimler AG, Stuttgart) and Philipp Hohl (Daimler AG, Stuttgart), which complete the program.

For many years, this workshop has been organized by the GI interest group (Fachgruppe) “Automotive Software Engineering”\(^1\). The steering committee was consequently involved in the organization of this workshop as well.

\(^1\)http://fg-ase.gi.de/