Preface

While in the early days of software engineering, a software was a result of a single software company, modern software strongly relies on components and infrastructure from third party vendors or open source suppliers. Software systems nowadays cover a wide range of applications, from optical character recognition, autonomous driving and safety relevant vehicle functions to medical imaging and biometrics. The workshops aim to bring together academics and industrial practitioners from different sectors to exchange and discuss the latest synergies in software engineering. These proceedings gather contributions submitted to and presented in two workshops which address this crucial issue in two distinct ways:

- The **Workshop on Quality Assurance in Computer Vision (QACV 2016)** reports on testing complete vision systems, i.e., systems comprising hardware, software, data communications and control. It thus tries to fill the gap between typical quality assurance (QA) processes and the current state of the evaluation techniques in different areas of computer vision (CV). In other words, the workshop focuses on the idea of a complementary combination of the two disciplines, CV and QA, culminating in a reliable and generic evaluation strategy for CV systems.

- The **Workshop on Digital Eco-Systems (DECOSYS 2016)** reports on emerging eco-systems in automotive software development and covers in particular domain-specific modeling languages and system integration for automotive measurement devices as well as web-based co-creation to facilitate automotive engineering. Further, this workshop addresses development issues such as the role of open source modeling-based engineering tools and skill-based team formation in software eco-systems. Lastly, the design of digital business models is illustrated in terms of a barrier-free travel assistance service.

Both workshops were co-located with the 28th International Conference on Testing Software and Systems (ICTSS 2016) in October 2016 in Graz, Austria. For QACV, four papers were accepted after a rigorous review process. Additionally, the workshop included one invited talk: ”Making Decisions: Closing the Loop between Simulation, 3D Real-time Rendering and Visual Analytics” by Michael Schwärzler and three spotlight presentations, meant to give the participants the opportunity to present their recent research activities and results relating to quality assurance and testing in computer vision, without submitting a regular paper. For DECOSYS, three papers were accepted after a thorough review. Moreover, three extended abstracts contributed to the success of the workshop.

As QACV and DECOSYS organizers, we would like to warmly thank the ICTSS 2016 organizing committee for giving the opportunity to host these workshops. We also warmly thank the many participants who contributed to the discussions with their remarks and by sharing their professional experience. We cannot finish without being deeply grateful to the reviewers on both program committees, who delivered timely and constructive reviews.

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For the DECOSYS workshop
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