

Workshop on Quality Assurance in Computer Vision (QACV-2016)



The 1st International Workshop on Quality Assurance in Computer Vision will take place in Graz, Austria on October 19th, 2016. It is organized in conjunction with ICTSS-2016 (<http://ictss2016.ist.tugraz.at/>).

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Important Dates

September 5, 2016:
Submission deadline

September 26, 2016:
Acceptance notification

Workshop Homepage:

<http://ictss2016.ist.tugraz.at/index.php/workshop-on-quality-assurance-in-computer-vision-qacv/>

Paper Submission

<https://easychair.org/conferences/?conf=qacv16>

Welcome

Computer vision (CV) is used nowadays in a wide range of real-world applications, from optical character recognition, autonomous driving and safety relevant vehicle functions, industrial inspection (rapid parts inspection for quality assurance), to medical imaging, fingerprint recognition and biometrics. Although a vast variety of literature covering evaluation techniques in subfields of the whole topic is available, still no study reports on testing a complete vision system, i.e., comprising hardware, software, data communication and control.

Obviously the high quality of CV applications has a great impact on their usability in real world scenarios. Hence beside traditional CV evaluation techniques – such as using test data sets as input and comparing the algorithm's output against a manually established ground truth - we have to control the quality of the involved applications by means of applying a more generic evaluation strategy. In this context, QA activities like peer reviews, coding guidelines, usage of software quality tools (static and dynamic analysers) offer many benefits, from being able to track the CV project's progress and estimate its relative complexity to helping us realize when we have achieved the desired state of quality.

The workshop welcomes contributions concerning QA activities applied in the CV domain, from CV specific evaluation techniques to more generic methods used both at software and hardware level in product development. We are particularly interested in original tools, languages and methods used for test data generation and test data validation in CV area, but also in testing tool evaluations based on vision application use cases.

Our aim is to bring together testing experts, computer vision developers, and industry practitioners in order to fill the gap between a typical quality assurance process and the current state of the evaluation methodology in different areas of computer vision discipline.



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Program Committee:

- Bernhard K. Aichernig (TU Graz/ IST)
- Csaba Beleznai (AIT)
- Wanda Benesova (Slovak University of Technology, FIIT, Vision & Graphics Group)
- Horst Bischof (TU Graz/ ICG)
- Josip Bozic (TU Graz/ IST)
- Luka Cehovin (University of Ljubljana, FRI, Visual Cognitive Systems Laboratory)
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- Rudolf Ramler (Software Competence Center Hagenberg/ KVS)
- Christian Reinbacher (TU Graz/ ICG)
- Bernhard Rinner (AAU Klagenfurt/ NES)
- Robert Sablatnig (TU Wien/ CBL)
- Franz Wotawa (TU Graz/ IST)

Topics of interest

Topics of interest for submission include, but are not limited to:

- QA methods and metrics used in CV projects (case studies and industrial applications)
- Test data generation (tools, languages, methods)
- Test data validation (tools, languages, methods)
- Fault localization and repair in CV systems (tools, languages, methods)
- Simulation of different types of failures, which can affect a vision system and their effect on vision algorithms
- Testing tools integration in CV industry (case studies)
- Application areas: robotics, industrial inspection, medical imaging, autonomous driving, etc.

Submission Information

Papers must be formatted according to the [ICTSS 2016 style guide](#) and they should not exceed:

- **6 pages** (short papers) describing a work in progress, a small piece of complete work, or a short industrial experience
- **12 pages** (long papers) describing original research that has led to relevant outcomes or a significant experience in applying quality assurance methodologies in a real-world context.

Each paper will be reviewed by at least two members of the QACV Program Committee.

Accepted papers will be published online in a volume of the [CEUR Workshop Proceedings series](#).

Organizing Committee:

- Iulia Nica (TU Graz/ Institute of Software Technology)
- Kathrin Juhart (JOANNEUM RESEARCH / DIGITAL)
- Harald Ganster (JOANNEUM RESEARCH / DIGITAL)
- Csaba Beleznai (AIT Austrian Institute of Technology)