

Budapest, 26-28 October 2016



How can advanced test automation face the challenges of fast product development in the age of the Internet of Things?

Software testing is generally considered as a process of executing test cases, which are designed by using test case design techniques. From a broader perspective, it can be defined as any activity, including static testing techniques, aimed at evaluating an attribute or capability of a program/system and determining if it meets its requirements and intended use.

Migration from manual to automated testing procedures not only provides effective use of labor force but also shortens time to market period and improves system quality. Agile development approaches such as SCRUM, KANBAN and Continuous Delivery cannot be applied without test automation. Hence, test automation & management becomes an increasingly critical and strategic necessity.

Bearing this in mind, ETSI's Technical Committee "Methods for Testing & Specification (TC MTS)" has instantiated a series of conferences focusing on test automation: the ETSI User Conference on Advanced Automated Testing (UCAAT). UCAAT is the successor of previous ETSI User Conferences on TTCN-3 (T3UC) and Model-Based Testing (MBTUC).

UCAAT is dedicated to application aspects of automated testing including model-based testing, cloud testing, mobile testing, test methodologies, test management and standardized test specification by focusing on the practical challenges that are often faced in industry. This conference brings together researchers and industrialists from different application domains such as Telco, Banking, IT Services, Automotive, Robotics, Healthcare, Defence and Software vendors to meet, discuss and share their practical experiences in the field of software testing.

Objectives

UCAAT offers an opportunity to come together to share experiences and learn about the latest advances in the industrial use of test automation. It welcomes presentation, poster and tutorial submissions relevant to modern test automation approaches, technologies and strategies in practice by means of case studies or experience reports.

Topics of interest include (but are not limited to):

- **Experiences and lessons learned from applying advanced test automation processes, e.g.**
 - o Model-Based Testing,
 - o Test Driven Development (TDD),
 - o Acceptance Test Driven Development (ATDD),
 - o Property Based Testing (PBT),
 - o Behavior Driven Development (BDD),
 - o Requirement based test generation and other advanced test processes in industrial settings.
- **Industrial case studies reporting experiences from applying advanced test automation languages, e.g.**
 - o TDL (Test description language),
 - o TTCN-3 (Test and Test Control Notation),
 - o UTP (UML Testing Profile),
 - o and domain-specific languages.

Important Dates

Submission of title, author & abstract
27 May 2016

Notification of acceptance
24 June 2016

Submission of final presentation
30 September 2016

- **Experiences from introducing and using advanced test automation**
 - o for testing of non-functional requirements, e.g. usability, security, robustness and performance,
 - o in processes with very short release cycles or in agile environments,
 - o in the context of DevOps (to bring development and operations together) and, more generally, the effects on company organizations.
- **Experience reports in the context of**
 - o Using Big Data techniques in Test Automation
 - o Automation of Testing of Big Data,
 - o Machine Learning, Mutation, and other advanced stratagems in Automated Testing,
 - o Utilizing Cloud services within Test Automation
 - o Utilizing Automation in Testing of the Cloud and Cloud based products,
 - o Automated change impact analyses techniques for Regression test selection
 - o Automated Early Testing (Static Analysis, Profiling, Technical Debt and Test Coverage Measurement),
 - o Automation challenges on testing 5G and Mobile
 - o Challenges of testing the Internet of Things in the Telco, Healthcare, Automotive and any other domains
 - o Automation in Software Product Line Engineering (SPLE), and
 - o other domains where test automation helps managing the challenges.
- **Experiences from long term application of test automation**
 - o Long term benefits and drawbacks of advanced testing frameworks & methodologies in general
 - o Good practices related to architecture and design of test automation software,
 - o Standardization efforts related to advanced test automation,
 - o Experiences and pitfalls in creating sustainable test automation solutions that can evolve over longer periods of time (particular process, platform, operational policies, application domain, etc.)
 - o Documenting, managing and maintaining assets produced by automated test (version control and validation of the test scripts and results, tracing of test documents and test executables, ensuring the long term reproducibility of test executions)
 - o Continuous improvement practices focusing on cost optimization of test infrastructure and test execution

Submission details

We are soliciting for

- short proposals for 20 minute conference **presentations** (incl. questions) by test automation users,
- 1,5 hour entry level or advanced **tutorials**, and
- **posters** focusing on practical aspect of test automation.

Submissions should seek for extracting a message for a broader user community and should not focus on tooling details; tools can be promoted in the vendor track organized for event sponsors. A proposal for a conference presentation, tutorial or poster presentation shall be no longer than three A4 pages and must follow one of the following templates:

- TemplatePresentationProposalUCAAT2016.doc (for conference presentation proposals)
- TemplateTutorialUCAAT2016.doc (for tutorial proposals)
- TemplatePosterUCAAT2016.doc (for poster proposals)

Please send the files at: <https://www.easychair.org/conferences/?conf=ucaat2016>

The independent program committee, composed mostly from industry stakeholders, will evaluate all proposals. Proposals in PDF format shall be submitted via EasyChair. The program including the slides of accepted presentations and posters will be made available electronically to participants and on the conference web site.