



ReVVerT 2011

ICST Workshop on Requirements and Validation, Verification & Testing

Berlin, Germany

March 25, 2011

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Important Dates

Submission (strict): December 21, 2010 (MDT)

Author notification: February 1, 2011

Final version: February 15, 2011

Workshop: March 25, 2011

Call for Papers

Verification and validation are important means to measure and guarantee the quality of systems. There are many existing and upcoming standards (IEC 61508, ISO 26262, DO-178B) that demand high quality of safety-related systems and the proof of it. Alone but also in combination with model-based approaches, this research area attracts a lot of interest in academia and in the industry.

All development projects are based on capturing requirements. The quality of the following activities in the development process, like design, verification, implementation, and testing, highly depends on the quality of the requirements (as defined in IEEE 830). Capturing good requirements and integrating them into the development process is an important issue. The goal of this workshop is to discuss and identify the intersections and mutual leverages of both topics.

Topics

The workshop on requirements and validation, verification & testing (ReVVerT) in 2011 has the objective to offer a forum for researchers and practitioners who are working on Requirements Engineering (RE) and Validation, Verification & Testing (V&V). The main goals of the workshop are to identify, discuss, and elaborate mutual impacts of RE and V&V.

The major questions about RE and V&V concern possible overlappings and mutual benefits for both techniques: How can V&V improve RE and how can V&V leverage the techniques around RE? How can we achieve complete, clear and testable requirements?, How to verify requirements?, How can we use requirements for validation and verification of systems?, How to trace between requirements and other development artifacts?

In order to discuss these and further similar questions, we would like to invite submissions related but not limited to the following topics:

- * V&V of requirements (are requirements complete, consistent, ...)
- * Testability in requirements engineering
- * Definition of formal acceptance criteria
- * Requirements clustering

- * V&V for requirements implementation (do the SUT and test suites implement / test all requirements? What coverage is reached?)
- * Requirements-based testing
- * Testing of non-functional requirements
- * Change management for requirements and V&V

- * Bridging the gap between requirements and testing
- * Test case generation from informal requirements documents
- * Traceability between requirements and testing
- * Traceability between requirements and the system or the model
- * Impact analysis on test cases in case of requirements change
- * Requirements-based test exit criteria
- * Test oracles based on requirements

- * Requirements for the test process and V&V
- * Requirements management and testing

Submissions and Publication

ReVVerT 2011 will include paper presentations and discussions. We explicitly invite to submit *research papers* and *industrial experience papers* (each 6 (normal) or 10 (extended) pages IEEE, two columns) and discussion proposals for a discussion session (1 page IEEE, two columns).

All accepted papers will be published in the *IEEE digital library*.

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