

CALL-FOR-PAPERS

Third Workshop on Automation of Software Test (AST'08)

(URL: <http://cms.brookes.ac.uk/staff/HongZhu/ASTworkshops/AST2008/>)

Special Theme: Model-Based Testing for Test Automation

Leipzig, Germany, 11 May 2008

at the 30th Int. Conf. on Software Engineering (ICSE'08) (<http://icse08.upb.de/>)

IMPORTANT DATES

- **Submission deadline:**
24 January 2008
- **Notification of acceptance:**
7 February 2008
- **Camera-Ready version:**
21 February 2008
- **Workshop date:**
11 May 2008

WORKSHOP ORGANIZERS

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Please see workshop website for more details and the workshop Programme Committee.

In software development practice, testing accounts for as much as 50% of total development efforts. It is imperative to reduce the cost and improve the effectiveness of software testing by automating the testing process. In the past decades, a great amount of research effort has been spent on automatic test case generation, automatic test oracles, etc. Automation is also the future trend of software testing practice.

The workshop is the successor of the first and second AST workshops held at ICSE 2006 and ICSE 2007, respectively. It will provide researchers and practitioners a forum for exchanging ideas, experiences, understanding of the problems, visions for the future, and promising solutions to the problems. The workshop will also provide a platform for researchers and developers of testing tools to work together to identify the problems in the theory and practice of software test automation and to set an agenda and lay the foundation for future development.

COVERED TOPICS

The workshop focuses on bridging the gap between the theories and practice of software test automation. The topics covered by the workshop include, but are not limited to, the following.

- 1) *Methodology*: Software test automation in the context of various software development methodologies, such as in model driven, component-based, agile, test-driven methodology, product lines, service-oriented, agent-oriented, aspect-oriented methodologies, and in evolutionary development.
- 2) *Technology*: Automation of various test techniques and methods used in various test related activities, support of various software testing methods, and applications to various specific types of software in various application domains.
- 3) *Software testing tools and environments*: Issues in the development, operation, maintenance and evolution of software testing tools and environments.
- 4) *Experiments, empirical studies and experience reports and vision of the future of software test automation.*

SPECIAL THEME and CASE STUDY SESSION

This year the workshop has a special theme on *model-based software testing for test automation*. Research work on this topic will be particular welcome, but papers on other topics are also welcome.

Three sessions on this theme will be organised as follows.

- A **keynote session** with an invited keynote speech by an active researcher in the area, followed by a long period of discussion.
- A **regular paper session** with presentations of accepted papers on the special theme to report the current state of art in research. We are seeking for regular paper for presentation in the regular session.
- A **case study session** aiming at an in-depth discussion on a specific open problem in test automation in order to identify the difficulties and specific issues of the problem, to evaluate potential solutions, and to share experiences. It will start with a description and discussion of the case study problems and invite the participants to discuss how the problems are to be addressed in various different approaches. The participants will be organised into a number of groups. Each group works on a

sub-problem of model-based testing. The results will be presented to the whole workshop.

Position papers on the case study are invited to express opinions and proposals as well as report experiences, research agendas, and progress on the specific problem. In particular, software testing tool vendors and researchers on various approaches to software test automation are invited to apply their research results and tools to this problem or to discuss how their approaches and/or tools are applicable to any specific aspect of the problem.

The specific case study is *how to automate the testing of UML/MDA platform StarUML*. StarUML is open source software. The source and executable code as well as documents of StarUML can be obtained online from the following URL. <http://staruml.sourceforge.net/en/>.

SUBMISSION

Two types of submissions are requested: the *regular* papers and the case study *position* papers.

Regular papers must be within the length between 6 and 8 pages and report research and/or practical experience in the area of software testing automation.

Position papers on the case study must address the issues of the case study. The length of a position paper can be slight shorter but no less than 4 pages. The maximum length is the same as regular papers, i.e. 8 pages.

All papers submitted to the workshop must be unpublished original work and must not have been submitted anywhere else for publication. The papers must be in English and in the format of *ACM SIG Proceedings Format* in either PDF or postscript format. Submissions must be made through online upload to the workshop paper submission website.

Submissions must clearly indicate either as a regular paper or a position paper on the special theme case study. Both position papers and regular papers will be reviewed by three workshop PC members, but using different criteria. Acceptance of papers for presentation at the workshop will be based on the merits and their relevance to the objective of the workshop.

PUBLICATION OF PAPERS

The accepted workshop papers including both regular and position papers will be published in the ICSE'08 conference proceedings in ACM and IEEE Digital Libraries. ICSE papers and Workshop papers will be published in two separate volumes. Workshop attendees will receive a memory stick with both proceedings volumes on it.

Authors of accepted papers are required to register for the workshop and present the paper at the workshop in order for the paper to be included in the proceedings and ACM and IEEE Digital Libraries. After the workshop, the authors of selected best regular papers will be invited to submit a significantly revised and extended version of their papers for consideration of publication either as a special issue in a journal, which will be subject to another round of refereeing. The authors of case study position papers and participants of the case study session will be invited to participate as the co-authors in the production of a case study report for consideration of formal publication.