



AST 2010
Fifth International Workshop on Automation of Software Test
<http://www.cs.alleghey.edu/ast2010/>

CALL-FOR-PAPERS

Charette Special Theme: Integration Testing
Special Session: Business and Industry Case Studies

Cape Town, South Africa, 3–4 May 2010

part of ICSE 2010 (<http://www.sbs.co.za/ICSE2010/>)

Submission deadline:

20 January 2010

Notification of acceptance:

15 February 2010

Camera-Ready version:

3 March 2010

Workshop dates:

3–4 May 2010

Workshop Co-Chairs

Prof. Wing Kwong Chan
City University of Hong Kong
Tat Chee Avenue, Hong Kong
wkchan@cs.cityu.edu.hk

Dr. Christof J. Budnik
Siemens Corporation
Corporate Research
755 College Road East
Princeton, NJ 08540, USA
christof.budnik@siemens.com

Prof. Gregory M. Kapfhammer
Department of Computer Science
Alleghey College
Meadville, Pennsylvania, USA
gkapfham@alleghey.edu

Steering Committee

Prof. Hong Zhu
Oxford Brookes University, UK

Prof. Shing-chi Cheung
The Hong Kong University of
Science and Technology,
Hong Kong

Dr. Jenny Li
Avaya Research, USA

Prof. Fevzi Belli
Paderborn University, Germany

Prof. Eric Wong
University of Texas at Dallas, USA

Dr. Steve Masticola
Siemens Corporation,
Corporate Research, USA

*Please see workshop website for
more details and the workshop
Program Committee.*

In software development practice, testing accounts for as much as 50% of the total development effort. It is therefore 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. Test automation is also becoming an important part of software testing practice.

The workshop is the successor of the first four AST workshops held at ICSE 2006-2009. 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.

TOPICS OF INTEREST

The workshop focuses on bridging the gap between the theories and practice of software test automation. The topics of interest 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, product lines, service-oriented, agent-oriented, and aspect-oriented methodologies, and in evolutionary development.
- 2) *Technology*: Automation of test techniques and methods used in test-related activities, support for software testing methods, and applications to specific types of software in different 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.*

This year, the workshop has no special theme. Therefore the charette discussion focuses on *Integration Testing* and submissions on this topic are especially encouraged, but papers on other topics are also welcome.

CHARETTE DISCUSSION: Integration Testing

This year the workshop continues the successful charette discussions of the previous focus on *Integration Testing*. Integration Testing aims to verify that the various components of a system work together, especially confirm that all interfaces between those components have been correctly implemented. Integration testing applies to the individual integration steps at different system levels.

The charette discussion sessions planned shall identify the key aspects of integration testing in the software testing automation that worth research efforts in the near future, to envision the approaches to address these aspects, and to form collaborations in order to solve the identified problems more effectively.

INDUSTRIAL CASE STUDIES

There will also be an “Industrial Case Studies” session at the workshop, with shorter presentations reporting the real state of the

practice in automation of software testing. Test practitioners who are especially encouraged to contribute their experiences and insights on test automation in this session. Submissions to this session do not have to conform to the main theme of the workshop.

Topics for this session include, but are not limited to, the following: new tools, new best practices, process innovations related to test automation, gaps in existing vendor toolsets, ideas and visions for near-term research work.

POSTER SESSION

Another novelty this year will be the poster session. The poster session shall improve interactions and help the networking among attendees. This enables the opportunity to engage in a much more detailed discussion of your research, the methodology and your findings than in a traditional panel session.

SUBMISSIONS

Three types of submissions are invited: *regular* papers, *case study* papers, and *case study* presentations.

Regular papers report research and/or practical experience in the area of software test automation. Both long (8-page) and short (4-page) papers are welcomed.

Submissions in the case study category may be either a short paper (no more than 4 pages) or a slide presentation (no more than 15 slides). Case study papers and presentations must report on practical applications of test automation.

All papers submitted to the workshop must be unpublished original work and must not have been submitted anywhere else for publication. The paper submissions must be in English and conform to the *ACM SIG conference proceedings format*. Presentations must be printed two slides per page and posters must no larger than DIN A0 format. All submissions must be submitted in either PDF or postscript format through online upload to the workshop paper submission website.

All submissions will be reviewed by three PC members, but using different criteria. Regular papers will be judged on the basis of their clarity, relevance, originality, and contribution. Case study papers and presentations as well as posters will be judged on the basis of their clarity, relevance, and interest to the workshop participants

PUBLICATION OF PAPERS

The accepted workshop papers including both regular and case study papers will be published in the ICSE 2010 Conference Proceedings Volume II in ACM Digital Library. Workshop attendees will receive a memory stick with both proceedings volumes on it.

Slide presentations and posters will be published on the AST 2010 website.

Authors of accepted papers and posters 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 Digital Libraries. Selected papers after extension will be invited to a special issue of *Software Quality Journal*.