



CALL-FOR-PAPERS

AST 2017

12th IEEE/ACM International Workshop on Automation of Software Test

(<http://tech.brookes.ac.uk/AST2017>)

In Conjunction with ICSE 2017 (<http://icse2017.gatech.edu>)

Buenos Aires, Argentina. May 20 - 28, 2017

IMPORTANT DATES:

Submission deadline:

Jan. 20, 2017

Notification of acceptance:

Feb. 17, 2017

Camera-Ready version:

Feb. 27, 2017

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Please see workshop website for 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 12th edition of the successful AST workshops held at ICSE conferences. It will provide researchers and practitioners with 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 theory and practice of software test automation. The topics cover all aspects related to software test automation. In particular, papers on the following topics are covered, but are not limited to:

- 1) *Methodology*: Software test automation in the context of various software development methodologies.
- 2) *Technology*: Automation of various test techniques and methods for testing related activities, as well as for testing various types of software applications.
- 3) *Tools and environments*: Issues in the development, operation, maintenance and evolution of software testing tools and environments, and their integration and inter-operation with other types of software development and maintenance tools and runtime support environments and platforms.
- 4) *Experiments, empirical studies and experience reports*: Experiments, empirical studies of software test automation, as well as reports on real experiences in using automated testing techniques, methods and tools in industry.
- 5) *Identification of problems and visions of the future*: The identification of problems that hamper wider adoption of automated test techniques, methods and tools and the analysis and specification of the requirements on automated software testing.

The AST 2017 workshop focuses on a special theme on **Test Automation in Agile Development**. Submissions on this topic are especially encouraged, but papers on other topics are also welcome.

CHARETTE DISCUSSIONS

The workshop continues the successful charette discussions of the previous years. As before, the charette sessions will focus on the topic of special theme.

Test automation plays a significant role in agile methodologies. The so-called XUnit automated testing frameworks are widely used in industry to support test driven and behaviour driven development (TDD/BDD). However, little research has been reported in the literature on effectiveness and efficiency of automated testing in agile development. The charette discussion sessions will aim at reviewing the current practices, understanding the challenges confronting practitioners, and establishing a research agenda on this topic.

INDUSTRIAL CASE STUDIES

There will also be an *Industrial Case Studies* session at the workshop, with presentations reporting the real state of the practice in automation of software testing. Test practitioners are especially encouraged to contribute their experiences and insights on test automation. 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.

SUBMISSIONS

Two types of submissions are invited: *regular* papers and *industrial case study* papers. The former presents research in the area of software test automation, while the latter presents practical applications of test automation. Both types of papers are limited to 7 pages in IEEE Conference Proceedings Format. It is not possible to pay for extra pages.

All papers submitted to the workshop must be unpublished original work and should not be under review or submitted elsewhere while being under consideration. All submissions must be in English and in PDF format. The submission URL is:

<http://www.easychair.org/conferences/?conf=AST2017>

PUBLICATION OF PAPERS

All submissions will be reviewed by three PC members. Regular papers will be judged on the basis of their clarity, relevance, originality, and contribution. Case study papers will be judged on the basis of their clarity, relevance, and interest to the workshop participants.

The accepted papers will be published in the AST 2017 Proceedings by IEEE CS Press and included in the IEEE Digital Libraries. Authors of accepted papers are required to register to the workshop and present the paper at the workshop in order for the paper to be included in the proceedings and the Digital Library.