Welcome to AST 2015—The 10th International Workshop on Automation of Software Test, held in conjunction with the 37th International Conference on Software Engineering (ICSE 2015) in Firenze, Italy, May 23 – 24, 2015.

The workshop is the 10th edition of the successful AST workshops held at ICSE 2006-2014. 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.

A test oracle is a means of checking the correctness of program’s behavior on test cases. It is one of the most important but also most difficult aspects of test automation. In recent years, there is a rapid growth in the research on this topic and a number of breakthroughs have been made, for example, in the employment of formal specification and model-based testing. In this setting, AST 2015 takes place with a special emphasis on the theme “Test Oracles.”

AST 2015 received a total of 34 submissions from 98 authors of 21 countries. Each paper was reviewed by at least three Program Committee members and evaluated according to the criteria of relevance, originality, soundness, maturity, and presentation quality. Online discussions about the reviews took place in order to resolve conflicting opinions, after the reviews were completed. Decisions were made based on the review results as well as the outcomes of the online discussions. 16 papers out of the 34 submissions were accepted as full papers. These papers will be presented in 7 technical sessions: (1) Test Oracles (2) GUI and Web Service Testing (3) Test Case Generation (4) Performance, Concurrency and Security Testing (5) Program Analysis (6) Fault Injection and Empirical Studies. In addition, two keynote speeches will be focused on the theme of test oracles. The charrette will provide the participants with an opportunity to work together to identify key research problems and challenges in the automation of test oracle, from both academic and industrial perspectives, and then brainstorm potential research paths toward addressing those problems.

We would like to thank everyone who made the workshop possible, including the authors for sharing their ideas and results with us, the Program Committee members and the external reviewers for their help in evaluating and selecting the papers, the AST Steering Committee, and the ICSE 2015 Workshop Chairs.

We thank you for attending the workshop and hope that you enjoy the program.

Up-to-date information on the workshop can be found at: http://tech.brookes.ac.uk/AST2015/index.html

Dan Hao, Leonardo Mariani, Rajesh Subramanyan
AST 2015 Program Committee Co-Chairs