# Call For Papers: 9th International Workshop on Search-Based Software Testing (SBST 2016)

May 16-17, 2016 - Austin, TX, USA (co-located with ICSE 2016)



### **Important Dates**

Submission Deadline: January 22, 2016 Competition Report Deadline: February 18, 2016

Author notification: February 19, 2016

# Workshop: <a href="https://cse.sc.edu/~ggay/sbst2016/">https://cse.sc.edu/~ggay/sbst2016/</a> Tool Competition: <a href="http://sbstcontest.dsic.upv.es/">http://sbstcontest.dsic.upv.es/</a>

Twitter: <a href="https://twitter.com/sbstworkshop">https://twitter.com/sbstworkshop</a>

## **About the Workshop**

Search-Based Software Testing (SBST) is the application of optimizing search techniques (for example, Genetic Algorithms) to solve problems in software testing. SBST is used to generate test data, prioritize test cases, minimize test suites, optimize software test oracles, reduce human oracle cost, verify software models, test service-orientated architectures, construct test suites for interaction testing, and validate real-time properties (among many others).

The objectives of this workshop are to bring together researchers and industrial practitioners both from SBST and the wider software engineering community to collaborate, to share experience, to provide directions for future research, and to encourage the use of search techniques in novel aspects of software testing in combination with other aspects of the software engineering lifecycle.

#### **Events**

The 2016 workshop will feature several events of interest:

**Keynotes** from Claire Le Goues (Carnegie Mellon University) & Tim Menzies (North Carolina State University).

**Panel**, where leading experts will discuss non-standard algorithms and fitness functions that may expand the efficacy and applicability of SBST.

**Tutorial** by Gordon Fraser (University of Sheffield) on the EvoSuite test generation framework - covering how to use it, how to integrate it into other tools, and how to extend it.

**Tool Competition**, where unit test generation tools will be benchmarked on coverage, fault detection, and efficiency.

#### **Call For Submissions**

Researchers and practitioners are invited to submit:

**Full papers** (maximum of 7 pages) to the workshop on original research either empirical or theoretical in SBST, practical experience of using SBST, or SBST tools.

**Short papers** (maximum of 4 pages) that describe novel techniques, ideas and positions that have yet to be fully developed; or are a discussion of the importance of a recently published SBST result by another author in setting a direction for the SBST community, and/or the potential applicability of the result in an industrial context.

**Position papers** (maximum of 2 pages) that analyze trends in SBST and raise issues of importance. Position papers are intended to seed discussion and debate at the workshop, and will be reviewed with respect to relevance and their ability to spark discussions.

**Tool Competition reports** (maximum of 4 pages). We invite researchers, students, and tool developers to design innovative new approaches to software test generation.

More information is available on our website. Papers must follow the ICSE 2016 formatting guidelines and should be submitted electronically to:

https://easychair.org/conferences/?conf=sbst2016

# **Workshop Organizers**

Gregory Gay, Co-Chair (University of South Carolina)
Justyna Petke, Co-Chair (University College London)
Tanja Vos, Competition Chair (Universidad Politecnica de Valencia)