14th International Workshop on Search-Based Software Testing (SBST 2021)

Co-located with ICSE: May 31st, 2020
Virtual (Madrid, Spain)

https://sbst21.github.io/

Important Dates

January 12th, 2021:	**Paper submission**
February 20th, 2021:	**Tools paper submission**
February 22nd, 2021:	Author notification
March 6th, 2021:	Tools paper notification
March 12th, 2021:	Camera-ready

Organizing Committee

Jie M. Zhang (University College London, UK)
Erik Fredericks (Oakland University, USA)

Research Topics

Papers should address a problem in the software testing/verification/validation domain or combine elements of those domains with other concerns in the software engineering lifecycle, such as

- Generating testing data, fuzzing, prioritizing test cases, constructing test oracles, minimizing test suites
- Verifying software models and validating real-time properties
- SBST for AI applications and machine learning techniques

Solutions should apply a metaheuristic search strategy such as:

- Random or local search
- Evolutionary algorithms (e.g. genetic algorithms, evolution strategies, and genetic programming), ant colony optimization, particle swarm optimization, and multi-objective optimization

We are pleased to announce the 14th workshop on search-based software testing (SBST) held virtually. 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 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.

We invite full research papers (8 pages), short papers (4 pages), position/early-stage research papers (2 pages), and tool competition entries (4 pages).

Direct link to EasyChair submission website:
https://easychair.org/conferences/?conf=sbst2021

Tools Competition

This year as well we are pleased to announce the nineth edition of the unit testing tool competition. We invite researchers to participate in the competition with their unit test generation tool for Java or cyber-physical systems. Tools will be evaluated against benchmarks with respect to code coverage and mutation score. Please see our website for more details.