The 15th Intl. Workshop on Search-Based Software Testing (SBST 2022)

Co-located with ICSE: May, 2022
Virtual (Pittsburgh, USA)

https://sbst22.github.io/

Important Dates

January 14th, 2022: **Paper submission**
January 14th, 2022: **Tool paper submission**
February 25th, 2022: Author notification
March 4th, 2022: Tool paper notification
March 18th, 2021: Camera-ready

Organising Committee

Giovani Guizzo (University College London, UK)
Sebastiano Panichella (Zurich University of Applied Sciences, Switzerland)

Research Topics

Papers should address a problem in the software testing, verification, or validation domain or combine elements of those domains with other concerns in the software engineering lifecycle, such as:
- generating testing data.
- fuzzing.
- prioritising test cases.
- constructing test oracles.
- minimising test suites.
- verifying software models.
- testing service-orientated architectures.
- test suites for interaction testing.
- SBST for AI applications.
- machine learning techniques for SBST.
- validating real time properties.

Solutions should apply a metaheuristic search strategy such as:
- random search.
- local search.
- evolutionary algorithms.
- ant colony optimisation.
- particle swarm optimisation.
- multi-objective optimisation.

About

Search-Based Software Testing (SBST) is the application of optimising search techniques (for example, Genetic Algorithms) to solve problems in software testing. SBST is used to generate test data, prioritise test cases, minimise test suites, optimise 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 or early-stage research papers (2 pages), and tool competition entries (4 pages).
https://easychair.org/conferences/?conf=sbst2022

Discussion Panel – SBST vs Fuzzing

SBST 2022 will hold a discussion panel entitled "Fuzzing vs SBST - Intersections and Differences". The goal of this panel is to have a ground for discussion on the main similarities and differences between Fuzzing and SBST. We believe that this strong panel comprised of researchers from both academia and industry will be the highlight of SBST'22.
https://sbst22.github.io/panel/

Tools Competition

This year as well we are pleased to announce the tenth edition of the testing tool competition. The competition has the goal to experiment with testing tools for a diversified set of traditional and emerging systems and domains. Please see our website for more details:
https://sbst22.github.io/tools/