CALL FOR PAPERS

CSTVA'16

International workshop on Constraints in Software Testing, Verification and Analysis 2016

http://research.microsoft.com/cstva2016/

A workshop of ISSTA'16, the International Symposium on Software Testing and Analysis, Saarbrücken, Germany, July 17th, 2016

Important Dates:

- Workshop paper submissions due April 22, 2016 (AOE)
- Notification to authors May 17, 2016
- Camera-ready copies of authors' papers May 24, 2016

Submission Details:

We invite three categories of submissions:

Research papers: Original contributions, presenting novel ideas, results or systems in constraint-based software engineering. Papers should not be published or submitted elsewhere during the time of evaluation.

Tool demonstrations, short papers & fast abstracts: Propose tool demonstrations, brief notes, or abstracts, presenting new tools, new challenges or groundbreaking results in constraint-based software engineering.

Presentation-only papers: describe work recently published or submitted elsewhere and will not be included in the proceedings. We see this as a way to provide additional access to important developments that CSTVA attendees may be unaware of. If accepted, papers in this category cannot be promoted to another category.

Submission site: Papers should be submitted via EasyChair.

Submitted papers must be in PDF format, formatted according to the EPiC Formatting Guidelines (please see http://www.easychair.org/publications/for_authors), and must not exceed the following size limits:

- Research papers: max 10 pages for the main text, including figures, tables and appendices, where references may occupy up to 2 additional pages
- Tool demonstration or fast abstract: max 6 pages

Papers in all three categories will be peer-reviewed. All accepted papers (except presentation-only) will be published in CEUR workshop proceedings (see http://ceur-ws.org/).

Topics: Recent years have seen an increasing usage and consequent impact of Boolean SAT, SMT and Constraint Programming (CP or CSP) solvers in testing, verification and analysis of software systems. The primary reason for this is the dramatic improvement in the efficiency and expressive power of solvers. As newer and more powerful solvers are built, software-engineering (SE) & programming-languages (PL) researchers dramatically scale existing applications such as symbolic-execution methods, or find unexpected applications for them, e.g., software product lines or fault localization methods.

This workshop will bring together researchers in solvers, software test and analysis, and other PL/SE areas, in order to raise the awareness of constraint solving in the broader PL/SE research community, and encourage development of new applications based on tunable, extensible, and programmable solvers. The workshop will focus on a broad range of topics where solvers have already made an impact, e.g., symbolic-execution-based testing, verification and analysis, as well as newer applications whose use is still nascent, e.g., synthesis, software product lines and fault localization. Submission topics include, but are not limited to, the following:

- Constraint-based analysis of programs and models
- Constraint-based test input generation and fault localization
- Solvers and computer security
- SMT and CP solvers for testing, verification, analysis, and synthesis
- Programmable SMT and CP solvers
- Combinations of constraint solvers
- Solvers for software product lines
- Solvers and fault-localization

Following the 6 previous editions of this workshop, held first at CP, then at the ICST conferences, and in 2014 at ICSE, this year's CSTVA workshop will be held at ISSTA with the goal of strengthening the links between the solver and PL & SE research communities. The workshop aims to encourage new applications of solvers, showcase their rich extensible APIs, and act as a forum for feedback from users to solver developers.

Organization:
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