

CALL FOR PAPERS

CSTVA'14

International workshop on Constraints in Software Testing, Verification and Analysis 2014

<https://ece.uwaterloo.ca/~vganesh/cstva14.html>

A workshop of ICSE'14, the 36th International Conference on Software Engineering,
Hyderabad, India, 31st May - 7th June 2014

Important Dates:

- Workshop paper submissions due January 14, 2014
- Notification to authors February 17, 2014
- Camera-ready copies of authors' papers March 14, 2014

Submission Details:

Research papers: Authors are invited to submit 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 Papers should not be published or submitted elsewhere during the time of evaluation.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 demo papers or fast abstract papers: Authors are invited to propose tool demonstrations or fast abstract, presenting new tools, new challenges or breaking results in constraint-based software engineering.

Submitted papers must be in PDF format, formatted according to the ACM Formatting Guidelines. (Please see <http://www.acm.org/sigs/publications/proceedings-templates>. LaTeX users, please use the "Option 2" style), and must not exceed the following size limits:

- Research papers: max 10 pages for the main text, including figures, tables, appendices, references may be included on up to 2 additional pages
- Tool demo/presentation-only papers: max 6 pages

All accepted papers (except presentation-only papers) will be published in the workshop proceedings.

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 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 and software engineering applications in order to raise the awareness of constraint solving in the broader software engineering 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

where their 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 solvers for testing, verification, analysis, and synthesis
- Programmable SMT solvers
- Combinations of constraint solvers
- Solvers for software product lines

Following the 5 previous editions of this workshop, held first at the CP and then the ICST conferences, this year's CSTVA workshop will be held at ICSE with the goal of strengthening the links between the solver and software engineering research communities. The workshop aims to encourage newer applications of solvers, showcase their rich extensible APIs, and act as a forum for feedback from users to solver developers.

Organizers:

Vijay Ganesh, Univ. Waterloo, Canada, vganesh@uwaterloo.ca
Nicky Williams, CEA LIST, France, nicky.williams@cea.fr

Program committee:

Kapil Vaswani, Microsoft Research, India
Aditya Nori, Microsoft Research, India
Rupak Majumdar, MPI Software Systems, Germany
Joxan Jaffar, National University of Singapore, Singapore
Frank Tip, University of Waterloo, Canada
Koushik Sen, University of California, Berkeley, USA
Cristian Cadar, Imperial College London, UK
Arnaud Gotlieb, SIMULA, Norway and INRIA, France
Frederic Dadeau, FEMTO-ST/INRIA, France
Krzysztof Czarnecki, University of Waterloo, USA
Julian Dolby, IBM TJ Watson Center, USA
Ofer Strichman, Technion, Israel
Nikolaj Bjorner, Microsoft Research, USA
Leonardo DeMoura, Microsoft Research, USA
Francois Bobot, CEA LIST, France
Sebastien Bardin, CEA LIST, France
Sylvain Conchon, Universite Paris Sud, France
Emina Torlak, University of California, Berkeley, USA
Daniel LeBerre, Universite d'Artois, France
Cesare Tinelli, University of Iowa, USA
Chris Wintersteiger, Microsoft Research, UK
Patrick Heymans, University of Namur, Belgium
Marsha Chechik, University of Toronto, Canada
Xiangyu Zhang, Purdue University