# Call for Papers

# Verified Software: Theories, Tools and Experiments (VSTTE) 2019

July 13-14, 2019, New York City, USA (co-located with CAV 2019)

https://sri-csl.github.io/VSTTE19/

# **Invited Speakers**

Tevfik Bultan *UC Santa Barbara*Marsha Chechik *University of Toronto*Aarti Gupta *Princeton University*Antoine Miné *Sorbonne Université* 

#### General Chair

Natarajan Shankar

#### **Program Chairs**

Supratik Chakraborty Jorge A. Navas

## Program Committee

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Valentin Wuestholz

The Verified Software Initiative (VSI), spearheaded by Tony Hoare and Jayadev Misra, is an ambitious research program for making large-scale verified software a practical reality. The Working Conference on Verified Software: Theories, Tools and Experiments (VSTTE) is the main forum for advancing the initiative. VSTTE brings together experts spanning the spectrum of software verification in order to foster international collaboration on the critical research challenges. The theoretical work includes semantic foundations and logics for specification and verification, and verification algorithms and methodologies. The tools cover specification and annotation languages, program analyzers, model checkers, interactive verifiers and proof checkers, automated theorem provers and SAT/SMT solvers, and integrated verification environments. The experimental work drives the research agenda for theory and tools by taking on significant specification/verification exercises covering hardware, operating systems, compilers, computer security, parallel computing, and cyber-physical systems. The 2019 edition of VSTTE will be the 11<sup>th</sup> working conference in the series, and will be co-located with CAV 2019 in New York City, USA

Scope: We welcome submissions describing significant advances in the production of verified software. We are especially interested in submissions describing large-scale verification efforts that involve collaboration, theory unification, tool integration, and formalized domain knowledge. We welcome papers describing novel experiments and case studies evaluating verification techniques and technologies. Topics of interest include, but are not limited to

Education Refinement methodologies
Requirements modeling Compositional analysis
Specification languages Tool integration

Specification/verification case-studies
Formal calculi

Formal calculi

Challenge proble

Formal calculi Challenge problems
Software design methods Integrated verification environment

Automatic code generation Verification tools

Work on diverse verification technologies, e.g., static analysis, dynamic analysis, model checking, theorem proving, satisfiability, are particularly encouraged.

Submissions: VSTTE 2019 will accept both long (limited to 16 pages, excluding references) and short (limited to 10 pages, excluding references) paper submissions. Short submissions also cover *Verification Pearls* describing an elegant proof or proof technique. Submitted research papers and system descriptions must be original and not submitted for publication elsewhere. Research paper submissions must be in LNCS format and must include a cogent and self-contained description of the ideas, methods, results, and comparison to existing work. Submissions of theoretical, practical, and experimental contributions are equally encouraged, including those that focus on specific problems or problem domains.

Papers can be submitted at https://easychair.org/conferences/?conf=vstte2019 Submissions that arrive late, are not in the proper format, or are too long will not be considered. The post-conference proceedings of VSTTE 2019 will be published by Springer-Verlag in the LNCS series. Authors of accepted papers will be requested to sign a form transferring copyright of their contribution to Springer-Verlag. The use of LaTeX and the Springer llncs class files (http://www.springer.de/comp/lncs/authors.html) is strongly encouraged.

## **Important Dates:**

April 23, 2019 (firm) : Title/Abstract submission April 29, 2019 (firm) : Full paper submission June 3, 2019 : Notification of acceptance

July 13–14, 2019 : Conference

Aug 26, 2019 (firm) : Camera-ready for post-conference proceedings