

Preface

This volume contains the proceedings of the 9th International Working Conference on Verified Software: Theories, Tools, and Experiments (VSTTE 2017), held during July 22–23, 2017 in Heidelberg, Germany, and co-located with the 29th International Conference on Computer-Aided Verification.

The goal of the VSTTE conference series is to advance the state of the art in the science and technology of software verification, through the interaction of theory development, tool evolution, and experimental validation. We solicited contributions describing significant advances in the production of verified software, i.e., software that has been proven to meet its functional specifications. Submissions of theoretical, practical, and experimental contributions were equally encouraged, including those that focus on specific problems or problem domains. We were especially interested in submissions describing large-scale verification efforts that involve collaboration, theory unification, tool integration, and formalized domain knowledge. We also welcomed papers describing novel experiments and case studies evaluating verification techniques and technologies. The topics of interest included education, requirements modeling, specification languages, specification/verification/certification case studies, formal calculi, software design methods, automatic code generation, refinement methodologies, compositional analysis, verification tools (e.g., static analysis, dynamic analysis, model checking, theorem proving, satisfiability), tool integration, benchmarks, challenge problems, and integrated verification environments.

The inaugural VSTTE conference was held at ETH Zurich in October 2005, and the following editions took place in Toronto (2008 and 2016), Edinburgh (2010), Philadelphia (2012), Menlo Park (2013), Vienna (2014), and San Francisco (2015).

This year we received 20 submissions. Each submission was reviewed by three members of the Program Committee. The committee decided to accept 12 papers for presentation at the conference. The program also included four invited talks, given by Jan Hoffmann (CMU, USA), Shaz Qadeer (Microsoft, USA), Christoph Weidenbach (MPI for Informatics, Germany), and Santiago Zanella-Beguelin (Microsoft, UK).

We would like to thank the invited speakers and the authors for their excellent contributions to the program this year, the Program Committee and external reviewers for diligently reviewing the submissions, and the organizers of CAV 2017 for their help in organizing this event. We also thank Natarajan Shankar for his tireless stewardship of the VSTTE conference series over the years.

The VSTTE 2017 conference and the present volume were prepared with the help of EasyChair.

October 2017

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Verified Software. Theories, Tools, and Experiments
9th International Conference, VSTTE 2017, Heidelberg,
Germany, July 22-23, 2017, Revised Selected Papers
Paskevich, A.; Wies, Th. (Eds.)
2017, XIII, 211 p. 69 illus., Softcover
ISBN: 978-3-319-72307-5