

Preface

This volume contains the papers presented at the 7th International Conference on Verified Software: Theories, Tool and Experiments (VSTTE), which was held in San Francisco, California, USA, during July 18–19, 2015, co-located with the 27th International Conference on Computer-Aided Verification. The final version of the papers was prepared by the authors after the event took place, which permitted them to take feedback received at the meeting into account.

VSTTE originated from the Verified Software Initiative (VSI), which is an international initiative directed at the scientific challenges of large-scale software verification. The inaugural VSTTE conference was held at ETH Zurich in October 2005, and was followed by VSTTE 2008 in Toronto, VSTTE 2010 in Edinburgh, VSTTE 2012 in Philadelphia, VSTTE 2013 in Menlo Park, and VSTTE 2015 in Vienna. The goal of the VSTTE conference is to advance the state of the art through the interaction of theory development, tool evolution, and experimental validation.

The call for papers for VSTTE 2015 solicited submissions describing large-scale verification efforts that involve collaboration, theory unification, tool integration, and formalized domain knowledge. We were especially interested in papers describing novel experiments and case studies evaluating verification techniques and technologies. We welcomed papers describing education, requirements modeling, specification languages, specification/verification, formal calculi, software design methods, automatic code generation, refinement methodologies, compositional analysis, verification tools (e.g., static analysis, dynamic analysis, model checking, theorem proving), tool integration, benchmarks, challenge problems, and integrated verification environments.

There were 25 submissions. Each submission was reviewed by at least three members of the Program Committee. The committee decided to accept 12 papers. The program also included two invited talks, given by Chris Hawblitzel (Microsoft Research) and Lee Pike (Galois Inc.), and a panel on “Software Verification Competitions: Lessons Learned and Challenges Ahead.”

We would like to thank the invited speakers, the panel members, and all submitting authors for their contribution to the program. We thank Natarjan Shankar for the help with the organization, our publicity chair, Daniel Bundala, our general chair, Martin Schaefer, and the CAV workshop chair, Dirk Beyer. Finally, we thank the external reviewers and the Program Committee for their reviews and their help in selecting the papers that appear in this volume.

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