

## Preface

This Conference Proceedings volume contains the written versions of the contributions presented during the Seventh International Workshop on Constraint Solvers in Testing, Verification and Analysis (CSTVA'16). This year the workshop was co-located with the International Symposium on Software Testing and Analysis (ISSTA). The venue was Saarbrücken, the capital of the Saarland, which is the smallest German federal state. It is located near the French border, halfway between Paris and Frankfurt on the high-speed railway that connects these two cities in less than four hours. Saarbrücken offers picturesque attractions and places of historic interest, making it a lovely destination for a hike or a day trip.

As in previous years, this year too CSTVA provided a platform for researchers and practitioners from the solver community on the one hand, and the programming-languages (PL) and software-engineering (SE) communities on the other hand, to interact, share feedback, exchange views, and form an ambitious and unified vision as to the role of solvers in the PL and SE research domains. The importance of this discussion stems from the rapid improvement in expressive power of Boolean satisfiability (SAT), satisfiability-modulo-theories (SMT) and constraint-programming (CP) solvers throughout the last decade. These impressive advances enable the integration of such solvers into PL/SE techniques and algorithms in new and powerful ways. This year, the workshop covered a wide variety of topics, including use of solvers to reason about weak memory models, multi-threaded software, to implement concolic as well as combinatorial testing efficiently, perform bounded model checking, and the properties of industrial SAT solving problems. The program consisted of three types of contributions: short papers, full papers and invited talks. There were two full-paper presentations, two short-paper presentations and two keynote talks.

We would like to thank all the participants for their contributions to the workshop program as well as for their contributions to these Proceedings. We extend special thanks to the German participants for their support and hospitality, which allowed all foreign participants to feel more at home. We are also grateful to the invited speakers — Vijay Ganesh from the University of and Murali Krishna Ramanathan from the Indian Institute of Science (IIS), Bangalore — for their inspiring talks and unwavering acceptance of our invitation.

We look forward to the Eighth International Workshop on Constraint Solvers in Testing, Verification and Analysis. We hope that it will be as interesting and enjoyable as previous CSTVA meetings.

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