

Preface

These are the conference proceedings of the 13th Haifa Verification Conference (HVC), held on the IBM Research campus in Haifa (HRL), Israel, during November 13–15, 2017. HVC is an annual conference dedicated to advancing the state of the art in verification and testing. The conference provides a forum for researchers and practitioners from academia and industry to share their work, exchange ideas, and discuss the future directions of testing and verification for hardware, software, and complex hybrid systems. It is also an opportunity to view tool demos that are related to the scope of the conference.

The first day of HVC 2017 was dedicated to tutorials. The conference itself was shortened to two days this year, which improved the acceptance ratio and raised the overall quality. This year, 34 full papers were submitted, out of which 13 were accepted. Further, six tool papers were submitted, out of which five were accepted, and five posters were submitted, out of which four were accepted.

Each of the papers and posters was reviewed by three Program Committee members or sub-reviewers of their choice. The reviewing process included a discussion between the reviewers and an attempt to reach a consensus. The posters and tool demos were presented in a dedicated session in the lobby of IBM-HRL.

In addition to the aforementioned papers, HVC 2017 hosted several high-quality keynote talks: Prof. Eli Ben-Sasson from the Technion in Haifa, Prof. Dino Distefano from Queen Mary University of London, Prof. Subhasish Mitra from Stanford University in California, and finally Kedar Namjoshi from Nokia Bell Labs in New Jersey.

The conference also held the annual HVC award ceremony. The award was given to Prof. Cristian Cadar from Imperial College in London for “his contributions to dynamic symbolic execution and the KLEE symbolic execution infrastructure” and more generally for “his outstanding contributions to program verification, bug finding, test generation and, more generally, to software reliability.” The members of the HVC Award Committee were:

Andrey Rybalchenko, Chair (Microsoft Research), Hana Chockler (King’s College London), Kerstin Eder (University of Bristol), Marta Kwiatkowska (University of Oxford), and Leonardo Mariani (University of Milano-Bicocca). We thank them all.

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We would like to extend our appreciation and sincere thanks to the local organization team from IBM Research Haifa Laboratory: Revivit Yankovich, the local coordinator, Tali Rabetti, the publicity chair, Tom Kolan, the tutorials chair, Niva Bar-Shimon, the Web master, and the Organizing Committee, which consisted of Eli Arbel, Laurent Fournier, Sharon Keidar-Barner, Moshe Levinger, Karen Yorav, and Avi Ziv.

We thank the Program Committee and the sub-reviewers that joined them in selecting such high-quality articles for the HVC program. We also thank IBM-HRL for hosting the conference without any registration fees, including the facility and the meals, and providing administrative support before, during, and after the conference. Let us not forget to thank our sponsors, Mellanox and Cadence, and the fabulous conference management system EasyChair, which made our life as conference chairs so simple.

Finally, we thank the participants for coming and engaging in fruitful discussions — we hope to see you next year as well!

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Ofer Strichman
Program Chair
Rachel Tzoref-Brill
General Chair

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