

Preface

This volume contains the proceedings of the 12th Haifa Verification Conference (HVC 2016). The conference was hosted by IBM Research Haifa Laboratory and took place during November 14–17, 2016. It was the 12th event in this series of annual conferences dedicated to advancing the state of the art and state of the practice in verification and testing. The conference provided 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.

Overall, HVC 2016 attracted 26 submissions in response to the call for papers. Each submission was assigned to at least three members of the Program Committee and in some cases additional reviews were solicited from external experts. The Program Committee selected 13 papers for presentation. In addition to the contributed papers, the program included four invited talks, by Swarat Chaudhuri (Rice University), Markulf Kohlweiss (Microsoft Research), Rajeev Ranjan (Cadence), and Andreas Veneris (University of Toronto). On the last day of the conference, the HVC award was presented to Marta Kwiatkowska (University of Oxford), Gethin Norman (University of Glasgow), and Dave Parker (University of Birmingham), for the invention, development and maintenance of the PRISM probabilistic model checker. A special session about verification and testing challenges of autonomous systems was held on the first day of the conference. Thanks to Yoav Hollander (Foretellix LTD) for presenting in this session. On November 13, one day before the conference, we held a tutorial day with tutorials by Sanjit A. Seshia (University of California, Berkeley) on formal inductive synthesis, by Hari Mony (IBM) on sequential equivalence checking for hardware design and verification, by Amir Rahat (Optima Design Automation) on design reliability, and by Cristian Cadar (Imperial College) on dynamic symbolic execution and the KLEE infrastructure.

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It was a pleasure to organize this conference with so many old friends!

Graz
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