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Preface

This volume holds the proceedings of HVC 2009. The Haifa Verification Conference is unique in bringing together research communities from formal and dynamic verification of hardware and software systems. It thus encourages both the recognition of common core questions and a healthy exchange of ideas and methods across domains. The attendees at HVC come from academia, industrial research labs, and industry, resulting in a broad range of perspectives.

The program for this year was chosen from 23 submissions. While we faced an unexpected drop in submissions, the resulting program was of a high quality. The paper by Anna Moss and Boris Gutkovich on "Functional Test Generation with Distribution Constraints" was chosen for the Best Paper Award. The HVC Award, given to the most promising contribution in the fields of software and hardware verification and test in the past five years, was given to Patrice Godefroid, Nils Klarlund, and Koushik Sen for their work on "DART: Directed Automated Random Testing."

The program included an outstanding set of keynote and invited talks. David Harel from the Weizmann Institute of Science spoke on "Can We Verify an Elephant?"; Mark Harman from CREST centre at King's College London, spoke on "The SBSE Approach to Automated Optimization of Verification and Testing;" and Harry Foster from Mentor Graphics, spoke on "Pain, Possibilities, and Prescriptions Industry Trends in Advanced Functional Verification." Tutorials were organized on "Post-Silicon Validation and Debugging," with Amir Nahir and Allon Adir (IBM), Rand Grey and Shmuel Branski (Intel), and Brad Quinton (University of British Columbia); "Satisfiability Modulo Theories" with Ofer Strichman (Technion); and "Constraint Satisfaction" with Eyal Bin (IBM). We would like to thank the speakers for putting together interesting and informative talks.

The conference was held at IBM's Research Labs at Haifa. We would like to thank the many people who were involved; in particular, Vered Aharon, who made sure that the conference ran smoothly each day. The Program Committee worked hard to put together the conference program; we thank them for their efforts. The HVC Organizing Committee provided considerable help and perspective. The HVC Award Committee, which was chaired by Sharad Malik (Princeton) and included Holger Hermanns (Saarland), Sarfraz Khurshid (University of Texas, Austin), Natarajan Shankar (SRI), and Helmut Veith (TU Darmstadt), did a wonderful job in picking a particularly deserving paper for the award among the many good candidates. Finally, we would like to thank all those who participated in the conference and made it an exciting and enjoyable event.

December 2010

Avi Ziv
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