Preface

These are the conference proceedings of the 4th Haifa Verification Conference, held October 27–30, 2008 in Haifa, Israel. This international conference is a unique venue that brings together leading researchers and practitioners of both formal and dynamic verification, for both hardware and software systems.

This year’s conference extended the successes of the previous years, with a large jump in the number of submitted papers. We received 49 total submissions, with many more high-quality papers than we had room to accept. Submissions came from 19 different countries, reflecting the growing international visibility of the conference. Of the 49 submissions, 43 were regular papers, 2 of which were later withdrawn, and 6 were tool papers. After a rigorous review process, in which each paper received at least four independent reviews from the distinguished Program Committee, we accepted 12 regular papers and 4 tools papers for presentation at the conference and inclusion in this volume. These numbers give acceptance rates of 29% for regular papers and 67% for tool papers (34% combined) — comparable to the elite, much older, conferences in the field. A Best Paper Award, selected on the basis of the reviews and scores from the Program Committee, was presented to Edmund Clarke, Alexandre Donzé, and Axel Legay for their paper entitled “Statistical Model Checking of Mixed-Analog Circuits with an Application to a Third-Order Delta-Sigma Modulator.”

The refereed program was complemented by an outstanding program of invited talks, panels, and special sessions from prominent leaders in the field. We have included in this volume abstracts, and papers if available, from the invited program. Among the invited program was the recipient of the 2008 HVC Award, chosen as the most influential work in the past five years in the field of verification. This year’s winner was Ken McMillan, for his work on interpolants.

A conference of this scope happens only through the tireless contributions of many people. On the technical side, we are grateful to the Program Committee and their many additional reviewers for ensuring the intellectual quality of the conference. We thank the HVC Session Chairs (in the order of appearance): Ken McMillan, Malay Ganai, Moshe Vardi, Daniel Jackson, Carl Pixley, Doron Peled, Jason Baumgartner, and Karen Yorav, for their knowledgeable and professional chairing of the sessions. We are especially thankful to organizers and chairs of the special sessions: Orna Grumberg, who organized and chaired a panel on coverage “across the verification domain,” and to Ziyad Hanna and Warren Hunt, who organized and chaired a special session on post-silicon verification. We also thank the HVC Award Committee, who tackled the unenviable task of selecting a single winner from several extraordinary works. On the logistical side, special thanks go to Vered Aharon for mastery of the countless organizational issues that needed to be addressed. We also thank IBM for providing administrative support and services such as graphic design, technical writing, printing, and, of course, a
cafeteria, free of charge to the conference participants. We would also like to thank the HVC Organizing Committee, who are an endless source of knowledge, wisdom, and guidance. Finally, thank you to everyone who participated in the conference: a successful conference is a unique little neighborhood in space and time, and it is the participants who create the magic of the moment.

October 2008

Alan J. Hu
Hana Chockler
# Organization

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<tbody>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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Table of Contents

Section 1: Invited Talks

Hazards of Verification ............................................................. 1
Daniel Jackson

Automata-Theoretic Model Checking Revisited ............................... 2
Moshe Y. Vardi

Proofs, Interpolants, and Relevance Heuristics (HVC 2008 Award Winner) ................................................................. 3
Ken McMillan

Is Verification Getting Too Complex? ........................................... 4
Yoav Hollander

Can Mutation Analysis Help Fix Our Broken Coverage Metrics? ........ 5
Brian Bailey

Practical Considerations Concerning HL-to -RT Equivalence Checking ................................................................. 6
Carl Pixley

Section 2: Regular Papers

A Framework for Inherent Vacuity .............................................. 7
Dana Fisman, Orna Kupferman, Sarai Sheinvald-Faragy, and Moshe Y. Vardi

A Meta Heuristic for Effectively Detecting Concurrency Errors ........ 23
Neha Rungta and Eric G. Mercer

A Uniform Approach to Three-Valued Semantics for $\mu$-Calculus on Abstractions of Hybrid Automata ........................................ 38
Kerstin Bauer, Raffaella Gentilini, and Klaus Schneider

Automatic Boosting of Cross-Product Coverage Using Bayesian Networks ................................................................. 53
Dorit Baras, Laurent Fournier, and Avi Ziv

Efficient Decision Procedure for Bounded Integer Non-linear Operations Using SMT(\texttt{LIA}) .................................................... 68
Malay K. Ganai
Evaluating Workloads Using Comparative Functional Coverage ............ 84
Yoram Adler, Dale Blue, Thomas Conti, Richard Prewitt, and Shmuel Ur

Iterative Delta Debugging ........................................... 99
Cyrille Artho

Linear-Time Reductions of Resolution Proofs .......................... 114
Omer Bar-Ilan, Oded Fuhrmann, Shlomo Hoory, Ohad Shacham, and Ofer Strichman

Significant Diagnostic Counterexamples in Probabilistic Model Checking ...................................................... 129
Miguel E. Andrés, Pedro D’Argenio, and Peter van Rossum

Statistical Model Checking of Mixed-Analog Circuits with an Application to a Third Order $\Delta - \Sigma$ Modulator ..................... 149
Edmund Clarke, Alexandre Donzé, and Axel Legay

Structural Contradictions ............................................. 164
Cindy Eisner and Dana Fisman

Synthesizing Test Models from Test Cases ............................ 179
Antti Jääskeläinen, Antti Kervinen, Mika Katar, Antti Valmari, and Heikki Virtanen

Section 3: Tool Papers

d-TSR: Parallelizing SMT-Based BMC Using Tunnels over a Distributed Framework ........................................... 194
Malay K. Ganai and Weihong Li

Progress in Automated Software Defect Prediction .................... 200
Thomas J. Ostrand and Elaine J. Weyuker

Moran Shochat, Orna Raz, and Eitan Farchi

User-Friendly Model Checking: Automatically Configuring Algorithms with RuleBase/PE ....................... 210
Ziv Nevo

Author Index ......................................................... 215