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Preface

This volume contains the proceedings of the Tenth International Conference on Computer-Aided Verification (CAV'98), held June 28 – July 2 at the University of British Columbia. The CAV conferences are dedicated to the advancement of the theory and practice of computer-assisted formal analysis methods for software and hardware systems. The conference covers the spectrum from theoretical results to concrete applications and has traditionally drawn contributions from both researchers and practitioners in both academia and industry. This year is no exception. We accepted 33 research papers out of 98 submissions and 10 short tool papers out of 19 submissions. Rounding out the program are a set of invited papers.

Given the practical and industrial aspects of CAV, we are very proud of the support we receive from industry. We would like to thank the following generous and forward-looking companies for their sponsorship of CAV'98:

Cadence Design Systems
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The conference program was selected by the program committee: Martin Abadi (DEC SRC, USA), Rajeev Alur (Univ. of Pennsylvania, USA), Ahmed Bouajjani (VERIMAG, France), Jerry Burch (Cadence Labs, USA), Olivier Coudert (Synopsys, USA), Werner Damm (Oldenburg University, Germany), David Dill (Stanford University, USA), Limor Fix (Intel, Israel), Patrice Godefroid (Bell Labs, USA), Mike Gordon (Cambridge University, Great Britain), Orna Grumberg (The Technion, Israel), Alan Hu, co-chair (Univ. of British Columbia, Canada), Daniel Jackson (MIT, USA), Bengt Jonsson (Uppsala University, Sweden), Kim Larsen (Aalborg University, Denmark), Ken McMillan (Cadence Labs, USA), Doron Peled (Bell Labs, USA), Carl Pixley (Motorola, USA), Amir Pnueli (Weizmann Institute, Israel), Carl Seger (Intel, USA), Natarajan Shankar (SRI International, USA), Joseph Sifakis (VERIMAG, France), Prasad Sistla (Univ. of Illinois, Chicago, USA), Fabio Somenzi (Univ. of Colorado, Boulder, USA), Moshe Vardi, co-chair (Rice University, USA), and Yaron Wolfsthal (IBM, Israel).

The following additional reviewers also helped in the evaluation of submitted papers: Parosh Abdulla, Roy Armoni, Tamarah Arons, Eugene Asarin,

Andrea Asperti, Adnan Aziz, Clark Barrett, Ilan Beer, Shoham Ben-David, Sergey Berezin, Roderick Bloem, Juergen Bohn, Bernard Boigelot, Dragan Bosjnatsjki, Olivier Bournez, Alex Brodsky, Stephen Brookes, Glenn Bruns, Paul Caspi, Judy Crow, David Cyrluk, Mads Dam, Dennis Dams, Juergen Dingel, Cindy Eisner, Henrik Ejersbo Jensen, Amy Felty, Martin Fraenzle, Ranan Fraer, Danny Geist, Boris Ginsburg, Leonid Glukhovski, Susanne Graf, Efim Gukovsky, Viktor Gyuris, Gary Hachtel, Alan Hartman, Henrik Huldgaard, Hardi Hungar, Norris Ip, Amitai Irron, Radhakrishnan Jagadeesan, Jae-Young Jang, Somesh Jha, Bernhard Josko, Gila Kamhi, Sagi Katz, Shmuel Katz, Yonit Kesten, Kaare Kristoffersen, Andreas Kuehlmann, Orna Kupferman, Yassine Lakhnech, Avner Landver, Karen Laster, Jorn Lind-Nielsen, Sela Mador-Haim, Bozga Maler, Monica Marcus, Will Marrero, Stephan Melzer, Stephan Merz, Kim Milvang-Jensen, Marius Minea, Faron Moller, In-Ho Moon, Laurent Mounier, David Notkin, Sam Owre, Paul Pettersson, Sriram Rajamony, Rajeev Ranjan, Kavita Ravi, Michel Raynal, Yoav Rodeh, Roni Rosner, Sitvanit Ruah, John Rushby, Mark Sauer, Elad Shahar, Dafna Sheinwald, Tom Shiple, Ze'ev Shtadler, Ofer Shtrichman, Michael Siegel, Vigyan Singhal, Gal Siton, Jens Skakkebaek, Arne Skou, Mandayam Srivas, Martin Steffen, Ulrich Stern, Jeffrey Su, Serdar Tasiran, Gadi Taubenfeld, Stavros Tripakis, Shmuel Ur, Koen van Eijk, Carsten Weise, Derek Williams, Gunnar Wittich, Pierre Wolper, Howard Wong-Toi, Han Yang, Wang Yi, Sergio Yovine. We would like to thank all of the reviewers for their time and expertise.

The steering committee consists of the founders of the conference: Edmund Clarke (Carnegie Mellon University, USA), Robert Kurshan (Bell Labs, USA), Amir Pnueli (Weizmann Institute, Israel), and Joseph Sifakis (VERIMAG, France). We thank them and last year's conference chair Orna Grumberg (Technion, Israel) for their helpful advice.

Finally, on the logistical side, the conference was held at UBC with the cooperation of the Computer Science Department and the Center for Integrated Computer Systems Research (CICSR). We thank CICSR Director Rabab Ward for sanctioning UBC's hosting of the conference. Computing Facilities Manager John Demco orchestrated computer access for the conference. The UBC Conference Center staff Melanie Kelleher, Brenda Kiernan, and Karen Read were invaluable in planning local arrangements. Holly Mitchell provided indispensable secretarial support. We thank them for their time and energy.

Vancouver, British Columbia
Houston, Texas

Alan J. Hu
Moshe Y. Vardi

April 1998

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