Preface

The International Symposium on Practical Aspects of Declarative Languages (PADL) is a forum for researchers and practioners to present original work emphasizing novel applications and implementation techniques for all forms of declarative concepts, including functional, logic, constraints, etc. Declarative languages build on sound theoretical foundations to provide attractive frameworks for application development. These languages have been successfully applied to a wide array of different real-world situations, including database management, active networks, software engineering, decision support systems, or music composition; whereas new developments in theory and implementation have opened up new application areas. Inversely, applications often drive the progress in the theory and implementation of declarative systems, as well as benefit from this progress.

The 7th PADL Symposium was held in Long Beach, California on January 10–11, 2005, and was co-located with ACM's Principles of Programming Languages (POPL). From 36 submitted papers, the Program Committee selected 17 papers for presentation at the symposium, based upon at least three reviews for each paper, provided from Program Committee members and additional referees.

Two invited talks were presented at the conference: one by Norman Ramsey (Harvard University) entitled "Building the World from First Principles: Declarative Machine Descriptions and Compiler Construction"; and a second by Saumya Debray (University of Arizona) entitled "Code Compression."

Following what has become a tradition in PADL symposia, the Program Committee selected one paper to receive the "Most Practical Paper" award. This year the paper judged the best in terms of practicality, originality, and clarity was "A Provably Correct Compiler for Efficient Model Checking of Mobile Processes," by Ping Yang, Yifei Dong, C.R. Ramakrishnan, and Scott A. Smolka. This paper presents an optimizing compiler for the pi-calculus that improves the efficiency of model-checking specifications in a logic-programming-based model checker.

The PADL symposium series is sponsored in part by the Association for Logic Programming (http://www.cs.kuleuven.ac.be/~dtai/projects/ALP/) and COMPULOG Americas (http://www.cs.nmsu.edu/~complog/). Thanks are also due to the University of Texas at Dallas for its support. Finally, we want to thank the authors who submitted papers to PADL 2005 and all who participated in the conference.

November 2004

Manuel Hermenegildo Daniel Cabeza

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