

Preface

This volume contains the papers presented at the 20th International Conference on Logic Programming, held in Saint-Malo, France, September 6–10, 2004. Since the first meeting in this series, held in Marseilles in 1982, ICLP has been the premier international conference for presenting research in logic programming. This year, we received 70 technical papers from countries all over the world, and the Program Committee accepted 28 of them for presentation; they are included in this volume.

A stand-by-your-poster session took place during the conference. It served as a forum for presenting work in a more informal and interactive setting. Abstracts of the 16 posters selected by the Program Committee are included in this volume as well.

The conference program also included invited talks and invited tutorials. We were privileged to have talks by three outstanding researchers and excellent speakers: Nachum Dershowitz (Tel Aviv University, Israel) talked on *Termination by Abstraction*, Michael Gelfond (Texas Tech University, USA) on *Answer Set Programming and the Design of Deliberative Agents*, and Gérard Huet (INRIA, France) on *Non-determinism Lessons*. Two of the invited talks appear in these proceedings. The tutorials covered topics of high interest to the logic programming community: Ilkka Niemelä gave a tutorial on *The Implementation of Answer Set Solvers*, Andreas Podelski on *Tree Automata in Program Analysis and Verification*, and Guillermo R. Simari on *Defeasible Logic Programming and Belief Revision*.

Satellite workshops made the conference even more interesting. Six workshops collocated with ICLP 2004:

- CICLOPS 2004, Colloquium on Implementation of Constraint and Logic Programming Systems, organized by Manuel Carro.
- COLOPS 2004, 2nd International Workshop on Constraint & Logic Programming in Security, organized by Frank Valencia.
- MultiCPL 2004, 3rd International Workshop on Multiparadigm Constraint, organized by Petra Hofstedt.
- TeachLP 2004, 1st International Workshop on Teaching Logic Programming, organized by Dietmar Seipel.
- WLPE 2004, 14th Workshop on Logic Programming Environments, organized by Susana Muñoz-Hernández and José Manuel Gómez-Perez.
- PPSWR 2004, Workshop on Principles and Practice of Semantic Web Reasoning, organized by Hans Jürgen Ohlbach and Sebastian Schaffert.

The traditional Prolog Programming Contest was organized by Tom Schrijvers and Remko Tronçon.

We take this opportunity to thank the many people who helped in the processing of the submissions and in the local organization of the conference. In particular we are grateful to Tristan Denmat, Ludovic Langevine, Elisabeth Le Bret, Joohyung Lee, Lydie Mabil, Matthieu Petit, Olivier Ridoux and Benjamin Sigonneau. We also thank the organizers of the workshops and the Prolog Programming Contest.

Finally, we thank all the authors of the submitted papers, the Program Committee members, and the referees for their time and effort spent in the reviewing process, Pål Halvorsen and Ketil Lund for their conference management software, ConfMan, and the conference chair Mireille Ducassé and her équipe in Rennes for the excellent organization.

June 2004

Bart Demoen, Vladimir Lifschitz