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24th International Conference, ICLP 2008

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Proceedings



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Preface

This volume contains the proceedings of the 24th International Conference on Logic Programming (ICLP 2008). The conference took place in Udine, Italy during December 9–13, 2008. The conference focuses on the foundations, developments, and applications in the area of logic programming. The ICLP series of conferences is aimed at providing a technical forum for presenting and disseminating innovative research results in the field of logic programming. The conference features technical presentations, tutorials, invited speakers, and a number of co-located events, including:

- The First Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2008)
- The Annual Meeting of the ISO/IEC JTC1/SC22/WG17 working group on the standardization of Prolog
- The Third International Workshop on Applications of Logic Programming to (Semantic) Web and Web Services (ALPSWS’08)
- The 18th Workshop on Logic-based Methods in Programming Environments (WLPE 2008)
- The 8th Colloquium on Implementation of Constraint Logic Programming Systems (CICLOPS 2008)
- The 15th RCRA Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion

ICLP 2008 also featured two special events. The first was the 4th ICLP Doctoral Student Consortium, an event specifically organized to encourage participation and interaction between doctoral students working in the area of logic programming. The second event was a special session celebrating 20 years of Stable Model Semantics. The session featured two guests of honor – Michael Gelfond and Vladimir Lifschitz, original creators of the Stable Model Semantics – two invited speakers (David Pearce and Nicola Leone) and six position presentations (by Chitta Baral, Marc Denecker, Thomas Eiter, Victor W. Marek, Ilkka Niemelä, and Torsten Schaub).

The ICLP program included four tutorials—Carla Piazza and Alberto Policriti (Systems Biology), Tom Schrijvers (Constraint Handling Rules), Peter O’Hearn (Separation Logic), and Angelo Montanari (Temporal Logics). The program also included two invited presentations, by Vítor Santos Costa (Life of a Logic Programming System) and by Pedro Domingos. An additional highlight of the program was a session aimed at uniting and inspiring the Prolog community, organized by Tom Schrijvers and Bart Demoen.

The technical program was composed of 37 full papers and 26 short papers. The acceptance rate was 3.16 for full papers (117 submissions) and 2.31 for short papers (60 submissions). The submissions originated from 31 countries

(Australia, Austria, Belgium, Brazil, Canada, Chile, China, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Indonesia, Ireland, Israel, Italy, Japan, South Korea, The Netherlands, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, UK, Ukraine, USA, and Vietnam).

As in previous years, the Program Committee selected the best paper and the best student paper. The Best Paper Award went to Michael Fink for his paper “Equivalences in Answer-Set Programming by Countermodels in the Logic of Here-and-There,” while the Best Student Paper Award went to Shay B. Cohen, Robert J. Simmons, and Noah A. Smith for their paper “Dynamic Programming Algorithms as Products of Weighted Logic Programs.”

ICLP 2008 was organized by the Association for Logic Programming (ALP), in collaboration with the Organizing Committees of the co-located events, the Dipartimento di Matematica e Informatica of the Università degli Studi di Udine, the Department of Computer Science at New Mexico State University, and the Clayton School of IT at Monash University. The event received generous sponsorships from the Association for Logic Programming, New Mexico State University, the National Science Foundation, National ICT Australia, the Università degli Studi di Udine, the Gruppo Nazionale per il Calcolo Scientifico, the Swedish Institute of Computer Science, Agemont, MIUR Project FIRB RBNE03B8KK, Kodak, and the municipality of Udine. The organization would also like to acknowledge the support of the Gruppo Ricercatori e Utenti di Logic Programming (GULP).

Many people contributed to the success of the conference, to whom we would like to extend our sincere gratitude. The General Chair, Agostino Dovier, established an outstanding Organizing Committee and worked hard to ensure a successful event, providing leadership in all aspects of the organization process. The members of the Program Committee provided invaluable help in the process of selecting papers and developing the conference program. The numerous referees invested countless hours in reading submissions and providing professional reviews. Andrea Formisano and Mirosław Truszczyński organized a fantastic special session to celebrate the 20 Years of Stable Model Semantics. Son Cao Tran (the Workshop Chair) and Tom Schrijvers and David S. Warren (Doctoral Consortium Chairs), and Bart Demoen (Prolog Programming Contest Chair) contributed to the addition of exciting and well-organized events to the program. The organization benefited from the hard work of Marcello Balduccini and Alessandro Dal Palú (Publicity Chairs), Raffaele Cipriano (Web Master), and the local organizing team: Alberto Casagrande, Elisabetta De Maria, Luca Di Gaspero, and Carla Piazza.

Last but not least, we wish to extend our heartfelt thanks to all the authors who submitted their excellent research contributions to the conference.

Organization

ICLP 2008 was organized by the Association for Logic Programming, in collaboration with the Dipartimento di Matematica e Informatica (Università degli Studi di Udine), the Department of Computer Science (New Mexico State University), and the Clayton School of IT (Monash University).

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