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Principles and Practice of Constraint Programming – CP 2003

9th International Conference, CP 2003
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Proceedings

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Preface

This volume contains the proceedings of the Ninth International Conference on Principles and Practice of Constraint Programming (CP 2003), held in Kinsale, Ireland, from September 29 to October 3, 2003. Detailed information about the CP 2003 conference can be found at the URL http://www.cs.ucc.ie/cp2003/

The CP conferences are held annually and provide an international forum for the latest results on all aspects of constraint programming. Previous CP conferences were held in Cassis (France) in 1995, in Cambridge (USA) in 1996, in Schloss Hagenberg (Austria) in 1997, in Pisa (Italy) in 1998, in Alexandria (USA) in 1999, in Singapore in 2000, in Paphos (Cyprus) in 2001, and in Ithaca (USA) in 2002.

Like previous CP conferences, CP 2003 again showed the interdisciplinary nature of computing with constraints, and also its usefulness in many problem domains and applications. Constraint programming, with its solvers, languages, theoretical results, and applications, has become a widely recognized paradigm to model and solve successfully many real-life problems, and to reason about problems in many research areas.

This year the research community has shown a very high interest in constraint programming, submitting to CP 2003 a record number of 181 papers, ranging over all aspects of constraint programming, from solvers to languages and from applications to theoretical results. After a reviewing period where each paper was read by three reviewers, and a two-day meeting in Padova (Italy) on June 3–4, 2003, the Program Committee decided to accept 48 papers as full papers, which have been allocated 15 pages in the proceedings. Among these, we selected a best paper: Control Abstraction by Local Search, by Pascal Van Hentenryck and Laurent Michel. We also decided to accept 34 poster papers, which have been allocated 5 pages in the proceedings. Poster papers are not to be thought of as second class papers, but rather as papers describing preliminary work which are, however, very promising and contain very fine and innovative ideas.

This volume also contains the papers of the four invited speakers, who honored the conference with their presentations: Henry Kautz, who told us about recent progress in propositional reasoning and search, Tuomas Sandholm, who proposed automated mechanism design as a new application area, Mark Wallace, who discussed the never-ending debate about languages versus packages, and Toby Walsh, who proposed constraint patterns as a useful modeling tool. Thanks to all of them!

A tradition since CP 2001, CP 2003 included a doctoral program, which allowed Ph.D. students working on constraint programming to come to the conference, to present their work and discuss it with senior researchers, and to listen to tutorials on career and doctoral issues. This volume contains one page for each of the 40 accepted students who don't have a paper on the same subject in the main technical program. I am especially grateful to Michela Milano, who did a

wonderful job both in organizing the doctoral program and in raising enough sponsor money to support the participation of 44 students.

CP 2003 also included 10 workshops and 4 advanced tutorials. The tutorials were on preferences (Ronen Brafman and Carmel Domshlak), randomized backtrack search (Carla P. Gomes), dynamic constraint solving (Gérard Verfaillie, Narendra Jussien), and configuration (Daniel Mailharro, Ulrich Junker). Many thanks to all the tutorialists, and also to Christian Bessière who organized all this very smoothly and with a very good resulting workshop and tutorial program.

CP 2003 also included a demo session showing the latest tools in constraint programming. Many thanks to James Little, who organized it very successfully, and also to the 8 groups who responded to the call for demos.

This year for the first time CP was co-located with the ECL^{i}PS^e summer school, held on September 28, 2003. This provided an opportunity for CP 2003 attendees to learn about the basics and also the latest tools available in the ECL^{i}PS^e environment from the developers and designers of the language. Thanks to Mark Wallace who had the idea to co-locate the school with CP 2003.

I would like to thank the whole Program Committee for the time spent with me over email in the 10 months preceding the conference and the two days we physically met for the PC meeting. I especially appreciated the friendly and constructive atmosphere in all the discussions about the submission process and the constructive attitute of all the members towards the numerous problem solving tasks. A special thanks goes to two members of the PC, Peter van Beek and Toby Walsh, who acted as special counselors in difficult situations such as problematic papers or delicate decisions.

I would also like to thank James Bowen, the conference chair, who dealt with all the difficult organizational aspects of the conference, and who managed to convince Science Foundation Ireland to support this conference in a significant way. Many thanks also to Steven Prestwich, the publicity chair.

The PC meeting could not have been organized without the help of my system people and of my Ph.D. student, K. B. Venable. Thanks!

Finally, I would like to thank explicitly all the sponsors: CoLogNET, Cork Constraint Computation Centre, the CP organizing committee, ERCIM, ILOG, the Intelligent Information System Institute at Cornell University, PARC Technologies, Science Foundation Ireland, and SICS. They were all very generous this year, enabling us to support many students and the invited speakers, and also to subsidize the conference fee and many other expenses.

Last but definitely not least, I want to thank the CP organizing committee, who asked me to serve as Program Chair of CP 2003 thus giving me the opportunity to live through a very exciting and learning experience. I hope I met at least some of their expectations for CP 2003.

July 2003 Francesca Rossi

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