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Principles and Practice of Constraint Programming - CP 2006

12th International Conference, CP 2006
Nantes, France, September 25-29, 2006
Proceedings

Springer

Volume Editor

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Preface

The 12th International Conference on the Principles and Practice of Constraint Programming (CP 2006) was held in Nantes, France, September 24–29, 2006. Information about the conference can be found on the Web at http://www.sciences.univ-nantes.fr/cp06/. Information about past conferences in the series can be found at http://www.cs.ualberta.ca/~ai/cp/.

The CP conference series is the premier international conference on constraint programming and is held annually. The conference is concerned with all aspects of computing with constraints, including: algorithms, applications, environments, languages, models and systems. This series of conferences was created to bring together researchers from different disciplines, interested in high-level modeling as well as sound and efficient resolution of complex optimization and satisfaction problems. Based on this interdisciplinary culture, the CP series of conferences is widely open to different communities of researchers interested in constraint satisfaction, SAT, mathematical programming, problem modeling, system design and implementation, etc.

This year, we received 142 submissions. All of the submitted papers received at least three reviews and were discussed in much detail during an online Program Committee meeting. As a result, the Program Committee chose to publish 42 full papers and 21 short papers in the proceedings (the selection rate for this year is 0.30 for full papers and 0.46 for all accepted contributions). Following the standard format for CP, the full papers were presented at the conference in two parallel tracks and the short papers were presented as posters during a dedicated session. This year, one paper was selected by a subcommittee of the Program Committee to receive a best paper award. The subcommittee was composed of Francesca Rossi, Mark Wallace and myself. To illustrate the variety of the topics addressed in the conference, as well as the industrial impact of constraint programming, the conference program also included four invited talks by Shabbir Ahmed, Giuseppe F. Italiano, Jean-Pierre Merlet and Helmut Simonis. An additional invited talk was given by the recipient of the second "Award for Research Excellence in Constraint Programming" given by the Association for Constraint Programming during the conference. Finally, the core of the technical program included three excellent tutorials: "Soft Constraint Solving" by Javier Larrosa and Thomas Schiex, "Constraint Satisfaction for Stimuli Generation for Hardware Verification" by Yehuda Naveh and "Constraint-Based Local Search in Comet" by Laurent Michel and Pascal Van Hentenryck.

Many other scientific contributions made the program of CP 2006 a rich mix of tradition and innovation. CP 2006 continued the tradition of the CP doctoral program, in which PhD students presented their work, listened to tutorials on career and ethical issues, and discussed their work with senior researchers via a mentoring scheme. As usual, the Doctoral Program was a big success with

the participation of 38 young researchers. Also traditional and very important to demonstrate the practical impact of the field was the systems demonstration session. Finally, the CP series are now well known for their first day of satellite workshops, mixing well-established meetings and new scientific events dedicated to the most recent evolutions of CP. We had ten workshops this year, each with their own proceedings, and the second solver competition was also organized during this workshop day.

CP 2006 also hosted for the first time two important events, addressing crucial aspects of our field: practical impact and future orientations of CP. The first event, dedicated to CP systems, was CPTools'06, the first international day on constraint programming tools, organized by Laurent Michel, Christian Schulte and Pascal Van Hentenryck. One of the main reasons of the success of CP is the ability of CP systems to address both expressiveness and efficiency issues. This successful meeting was the perfect place for researchers and practitioners to exchange on all aspects of system design and usability. The second forum, organized by Lucas Bordeaux, Barry O'Sullivan and Pascal Van Hentenryck, was a half-day plenary workshop called "The Next Ten Years of Constraint Programming." This event was an important occasion to share ideas on the future of our discipline during exciting and lively discussion and debates.

On behalf of the CP community, I would like to take this opportunity to warmly thank the many people who participated by their hard work and constant commitment to the organization of CP 2006.

My first and warmest thanks are for Narendra Jussien, General Co-chair of CP 2006, who did an amazing job on the organization front. It was a real pleasure to work with him on this project. The different organization chairs were particularly efficient, professional and friendly. Barry O'Sullivan, Workshop and Tutorial Chair, helped us all along the process and was instrumental in many aspects of the organization. I want to thank him here warmly for his efficiency and his patience. Thank you very much to Zeynep Kiziltan and Brahim Hnich, the Doctoral Program Chairs, for their efficiency and reactivity on this difficult task. Laurent Michel was Chair for poster and demo presentations and took care of these important aspects of the conference in a very smooth way. Many thanks to him. Christian Schulte and Mikael Lagerkvist, Publicity Chairs, had the crucial mission of advertising the conference. I thank them here very much for their friendly and competent participation. It was a great pleasure to work with the CP 2006 Program Committee on the scientific program. The commitment and reactivity of its members as well as the amazing amount of work they invested in reviewing and discussing the submitted papers was truly impressive and I would like to thank them all for their hard work. Thank you to Francesca Rossi and Mark Wallace for their help on the Best Paper Award Committee. Locally, nothing could have been done without the commitment and hard work of the Local Organizing Committee members. Let me warmly thank here Charlotte, Christophe, Christophe, Frédéric, Guillaume, Hadrien, Jean-Marie, Marco, Philippe, Romuald, Sophie, Thierry, Thomas and Xavier.

The final thanks go to the institutions that helped sponsor the conference and particularly to support the doctoral program and to bring in invited speakers. These institutions and companies are: the Région des pays de la Loire, Nantes Métropole, ILOG, the École des Mines de Nantes, the Association for Constraint Programming, the Cork Constraint Computation Center, the Intelligent Information Systems Institute, the Laboratoire d'Informatique de Nantes Atlantique, the Université de Nantes, the Conseil Général de Loire Atlantique and the Association Française pour la Programmation par Contraintes.

September 2006 Frédéric Benhamou

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