

Lecture Notes in Artificial Intelligence 5655

Edited by R. Goebel, J. Siekmann, and W. Wahlster

Subseries of Lecture Notes in Computer Science

Angelo Oddi François Fages
Francesca Rossi (Eds.)

Recent Advances in Constraints

13th Annual ERCIM International Workshop
on Constraint Solving
and Constraint Logic Programming, CSCLP 2008
Rome, Italy, June 18-20, 2008
Revised Selected Papers

Series Editors

Randy Goebel, University of Alberta, Edmonton, Canada
Jörg Siekmann, University of Saarland, Saarbrücken, Germany
Wolfgang Wahlster, DFKI and University of Saarland, Saarbrücken, Germany

Volume Editors

Angelo Oddi
ISTC-CNR, Institute of Cognitive Science and Technology
National Research Council of Italy
Via San Martino della Battaglia 44, 00185 Rome, Italy
E-mail: angelo.odd@istc.cnr.it

François Fages
INRIA Paris-Rocquencourt
BP 105, 78153 Le Chesnay Cedex, France
E-mail: francois.fages@inria.fr

Francesca Rossi
University of Padova, Department of Pure and Applied Mathematics
Via Trieste 63, 35121 Padova, Italy
E-mail: frossi@math.unipd.it

Library of Congress Control Number: 2009930948

CR Subject Classification (1998): I.2.3, F.3.1-2, F.4.1, D.3.3, F.2.2, G.1.6, I.2.8

LNCS Sublibrary: SL 7 – Artificial Intelligence

ISSN 0302-9743
ISBN-10 3-642-03250-8 Springer Berlin Heidelberg New York
ISBN-13 978-3-642-03250-9 Springer Berlin Heidelberg New York

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Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 12719471 06/3180 5 4 3 2 1 0

Preface

Constraint programming (CP) is a powerful programming paradigm for the declarative description and the effective solving of large combinatorial problems. Based on a strong theoretical foundation, it is increasingly attracting commercial interest. Since the 1990s, CP has been deployed by many industry leaders, in particular to model heterogeneous optimization and satisfaction problems. Examples of application domains where such problems naturally arise, and where constraint programming has made a valuable contribution, are scheduling, production planning, communication networks, routing, planning of satellite missions, robotics, and bioinformatics.

This volume contains the papers selected for the post-proceedings of the 13th International Workshop on Constraint Solving and Constraint Logic Programming (CSCLP 2008) held during June 18–20, 2008 in Rome, Italy. This workshop was organized as the 13th meeting of the working group on Constraints of the European Research Consortium for Informatics and Mathematics (ERCIM), continuing a series of workshops organized since the creation of the working group in 1997. A selection of papers of these annual workshops plus some additional contributions have been published since 2002 in a series of volumes which illustrate the evolution in the field, under the title “Recent Advances in Constraints” in the *Lecture Notes in Artificial Intelligence* series.

This year there were 14 submissions to the proceedings. Each submission was reviewed by three reviewers and the Program Committee decided to accept nine papers for publication in this volume. The papers in this volume present original research results, as well as applications, in many aspects of constraint solving and constraint logic programming. Research topics that can be found in the papers are first-order constraints, symmetry breaking, global constraints, constraint optimization problems, distributed constraint solving problems, soft constraints, as well as the analysis of application domains such as cumulative resource problems and hybrid systems.

The editors would like to take the opportunity to thank all the authors who submitted a paper to this volume, as well as the reviewers for their helpful and invaluable work. The organization of the CSCLP 2008 workshop and the publication of this volume was made possible thanks to the support of the European Research Consortium for Informatics and Mathematics (ERCIM), the Planning and Scheduling Team (PST) at the Institute of Cognitive Science and Technology (ISTC-CNR) of Rome, the Association for Constraint Programming (ACP), and the Department of Pure and Applied Mathematics, University of Padova, Italy. We hope that the present volume is useful to everyone interested in the

recent advances and trends in constraint programming, constraint solving, problem modeling, and applications.

May 2009

Angelo Oddi
François Fages
Francesca Rossi

Organization

CSCLP 2008 was organized by the ERCIM Working Group on Constraints.

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