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Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems

6th International Conference, CPAIOR 2009
Pittsburgh, PA, USA, May 27-31, 2009
Proceedings

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Library of Congress Control Number: Applied for

CR Subject Classification (1998): G.1.6, G.1, G.2.1, F.2.2, I.2, J.1

LNCS Sublibrary: SL 1 – Theoretical Computer Science and General Issues

ISSN 0302-9743

ISBN-10 3-642-01928-5 Springer Berlin Heidelberg New York

ISBN-13 978-3-642-01928-9 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: 12686247 06/3180 5 4 3 2 1 0

Preface

The 6th International Conference on the Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2009) was held in Pittsburgh, USA, May 29–31, 2009. More information about the CPAIOR conference series can be found at www.cpaior.org. This volume contains the papers and extended abstracts that were presented during the conference.

In total there were 65 high-quality submissions, including 41 full paper and 24 extended abstract submissions. The full papers reflect original unpublished work, whereas the extended abstracts can be either original unpublished work or a summary of work published elsewhere. Each full paper was reviewed by at least three Program Committee members, and most extended abstracts by two. After general discussion, the Program Committee accepted 20 full papers and 10 extended abstracts for presentation during the conference and publication in this volume. The submissions, reviews, discussion, and the proceedings preparation were all handled by the EasyChair system. We thank the Program Committee, as well as the external reviewers, for their hard work.

In addition to the full paper and extended abstract presentation, the program contained two invited talks, by Eva K. Lee (Georgia Institute of Technology) and Mark Wallace (Monash University). A summary of each invited talk is also included in this volume.

A two-day tutorial on constraint programming was held before the conference, during May 27–28, 2009. There were four parts to the tutorial: “Introduction to CP Concepts” presented by Peter van Beek, “Modeling in CP” presented by Helmut Simonis, “Combining CP and Operations Research” presented by John Hooker, and “CP Languages, Systems, and Examples” presented by Laurent Michel, Pascal Van Hentenryck, and Paul Shaw. We thank all tutorial speakers for their efforts. We also thank the tutorial chair Gilles Pesant for his help in organizing this event.

Two satellite workshops took place on May 28, 2009. The workshop “Bound Reduction Techniques for Constraint Programming and Mixed-Integer Nonlinear Programming” was organized by Pietro Belotti. The workshop “Optimization in Health and Medicine” was organized by Sebastian Brand, Eva K. Lee, and Barry O’Sullivan.

Finally, we want to thank all the sponsors who made this event possible: National Science Foundation, Tepper School of Business, Air Force Office of Scientific Research, Association for Constraint Programming, IBM T.J. Watson Research Center, Jeppesen Technology Services, NICTA, and ILOG.

March 2009

Willem-Jan van Hoeve
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