Lecture Notes in Computer Science 2916

Edited by G. Goos, J. Hartmanis, and J. van Leeuwen

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Catuscia Palamidessi (Ed.)

Logic Programming

19th International Conference, ICLP 2003
Mumbai, India, December 9-13, 2003
Proceedings

Springer

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Cataloging-in-Publication Data applied for

A catalog record for this book is available from the Library of Congress.

Bibliographic information published by Die Deutsche Bibliothek
Die Deutsche Bibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at <http://dnb.ddb.de>.

CR Subject Classification (1998): D.1.6, I.2.3, D.3, F.3, F.4

ISSN 0302-9743
ISBN 3-540-20642-6 Springer-Verlag Berlin Heidelberg New York

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Printed in Germany

Typesetting: Camera-ready by author, data conversion by PTP-Berlin, Protago-TeX-Production GmbH
Printed on acid-free paper SPIN: 10973417 06/3142 5 4 3 2 1 0

Preface

This volume contains the proceedings of the 19th International Conference on Logic Programming, ICLP 2003, which was held at the Tata Institute of Fundamental Research in Mumbai, India, during 9–13 December, 2003. ICLP 2003 was colocated with the 8th Asian Computing Science Conference, ASIAN 2003, and was followed by the 23rd Conference on Foundations of Software Technology and Theoretical Computer Science, FSTTCS 2003. The latter event was hosted by the Indian Institute of Technology in Mumbai.

In addition, there were five satellite workshops associated with ICLP 2003:

- PPSWR 2003, Principles and Practice of Semantic Web Reasoning, 8th Dec. 2003, organized by François Bry, Nicola Henze, and Jan Maluszynski.
- COLOPS 2003, COnstraint & LOgic Programming in Security, 8th Dec. 2003, organized by Martin Leucker, Justin Pearson, Fred Spiessens, and Frank D. Valencia.
- WLPE 2003, Workshop on Logic Programming Environments, organized by Alexander Serebrenik and Fred Mesnard.
- CICLOPS 2003, Implementation of Constraint and LOgic Programming Systems, 14th Dec. 2003, organized by Michel Ferreira and Ricardo Lopes.
- SVV 2003, Software Verification and Validation, 14th Dec. 2003, organized by Sandro Etalle, Supratik Mukhopadhyay, and Abhik Roychoudhury.

Starting with the first conference held in Marseilles in 1982, ICLP has been the premier international conference for presenting research into logic programming. ICLP 2003 received 81 submissions, from which the Program Committee selected 23 papers for presentation and inclusion in the proceedings. In addition, these proceedings contain the abstracts of 18 selected posters. For the first time, these posters have been organized into a series of short presentations complementing the usual display session at the conference. Credit is due to Poster Chair M.R.K. Krishna Rao for the extreme care with which he managed all matters related to the posters, including their selection, the editing of the abstracts for the proceedings, and the organization of the poster session itself.

Finally, the proceedings contain the contributions of the invited speakers and invited tutorial speakers. We were privileged to have Greg Morriset as keynote speaker, in common with ASIAN 2003. The other invited talks were given by Rolf Backofen, Maurizio Gabbrielli, Olivier Ridoux, and William Winsborough. The tutorial speakers were Paola Bruscoli, François Fages, Kung-Kiu Lau, and Frank S. Valencia.

In addition, the conference program contained some special sessions: a Programming Contest, organized by Bart Demoen; an open session on the next LP language, organized by Bart Demoen and Peter Stuckey; and a Teaching Panel, organized by Mireille Ducassé.

The Association of Logic Programming sponsored some awards assigned to the authors of the best works accepted at ICLP 2003 in the categories of student papers and application papers.

- The best student paper awards were received by:
  - Frank D. Valencia, for the paper *Timed Concurrent Constraint Programming: Decidability Results and Their Application to LTL*, and
  - Brigitte Pientka, for the paper *Higher-Order Substitution Tree Indexing*.
- The best application paper award was received by: Frej Drejhammar, Christian Schulte, Per Brand, and Seif Haridi for the paper *Flow Java: Declarative Concurrency for Java*.

On behalf of the Program Committee I would like to thank the authors of the submitted papers and the external referees, whose timely and expert reviews were indispensable in the evaluation of the submissions. Many thanks also to the Conference Chair, R.K. Shyamasundar, to the Poster Chair, and to the Publicity Chair, Jan-Georg Smaus, for the extraordinary work they did. Furthermore we want to express our appreciation to the invited speakers and to the invited tutorial speakers, whose excellent talks contributed greatly to the success of the conference. Special thanks go to the workshops organizers, to the Workshop Chairs, N. Raja and Vitor Santos Costa, and to the organizers of the special sessions. The Poster Chair, M.R.K. Krishna Rao, gratefully acknowledges the excellent support provided by the King Fahd University of Petroleum and Minerals in his activities related to ICLP 2003. Finally, we would like to thank Richard van de Stadt for his conference management software, CyberChair, which was extremely useful for dealing with the electronic submissions and with the selection process.

September 2003 Catuscia Palamidessi

Organization

ICLP 2003 was organized by the Tata Institute of Fundamental Research (TIFR) in Mumbai (India).

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