

Lecture Notes in Artificial Intelligence 4160

Edited by J. G. Carbonell and J. Siekmann

Subseries of Lecture Notes in Computer Science

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Logics in Artificial Intelligence

10th European Conference, JELIA 2006
Liverpool, UK, September 13-15, 2006
Proceedings

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Library of Congress Control Number: 2006932041

CR Subject Classification (1998): I.2, F.4.1, D.1.6

LNCS Sublibrary: SL 7 – Artificial Intelligence

ISSN	0302-9743
ISBN-10	3-540-39625-X Springer Berlin Heidelberg New York
ISBN-13	978-3-540-39625-3 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: 11853886 06/3142 5 4 3 2 1 0

Preface

Logics provide a formal basis, and key descriptive notation, for the study and development of applications and systems in Artificial Intelligence (AI). With the depth and maturity of formalisms, methodologies, and systems today, such logics are increasingly important. The European Conference on Logics in Artificial Intelligence (or Journées Européennes sur la Logique en Intelligence Artificielle — JELIA) began back in 1988, as a workshop, in response to the need for a European forum for the discussion of emerging work in this field. Since then, JELIA has been organised biennially, with English as official language, and with proceedings published in Springer's Lecture Notes in Artificial Intelligence. Previous meetings took place in Roscoff, France (1988), Amsterdam, Netherlands (1990), Berlin, Germany (1992), York, UK (1994), Évora, Portugal (1996), Dagstuhl, Germany (1998), Málaga, Spain (2000), Cosenza, Italy (2002), and Lisbon, Portugal (2004).

The increasing interest in this forum, its international level with growing participation from researchers outside Europe, and the overall technical quality, has turned JELIA into a major forum for the discussion of logic-based approaches to AI. JELIA 2006 constituted the Tenth International Conference on Logics in Artificial Intelligence, and was held in Liverpool (UK) in September 2006. As with previous JELIA conferences, the aim of JELIA 2006 was to bring together active researchers interested in all aspects concerning the use of logics in AI to discuss current research, results, problems and applications of both a theoretical and practical nature.

We received a total of 96 submissions, comprising 77 regular papers and 19 tool descriptions. These submissions represented a wide range of topics throughout Artificial Intelligence and, as well as originating in Europe, we were pleased to receive submissions from a variety of other countries across the world, including Australia, Brazil, China, Sri Lanka, South Korea and USA. We would like to take this opportunity to thank all those who submitted papers and whose contributions have helped make such a strong final programme.

The regular paper submissions were usually evaluated by at least three members of the Programme Committee (see below) and in many cases further discussion on the merits of particular papers was entered into. Tool description papers were each evaluated by two members of the Programme Committee. We would like to thank all the members of the Programme Committee and the additional referees (see below) for the professional way in which they carried out their reviewing and selection duties.

The review process was extremely selective and many good papers could not be accepted for the final program. As a result of the reviewing process 34 regular papers (44% of submissions) were selected for full presentation at JELIA 2006. In addition, 12 tool descriptions (62% of submissions) were selected for presentation and demonstration. The papers appearing in these proceedings cover a range of topics within the scope of the conference, such as logic programming, description logics, non-monotonic reasoning, agent theories, automated reasoning, and machine learning. Together with the programme of technical papers, we are pleased to acknowledge a strong series of

invited talks by leading members of the Logic in AI community: Sašo Džeroski (Jozef Stefan Institute, Slovenia); Ilkka Niemelä (Helsinki University of Technology, Finland); and Andrei Voronkov (University of Manchester, UK). We are confident that you will find the contents of this volume stimulating and enlightening, and that it will provide an invaluable reference to many current research issues in Logics in AI.

Finally, we are indebted to the members of the JELIA Steering Committee (see below) for selecting Liverpool for the tenth JELIA event, to sponsorship from EPSRC, AgentcitiesUK and the University of Liverpool, and to Catherine Atherton and Dave Shield for their invaluable assistance in hosting this conference.

July 2006

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