

## Preface

These are the proceedings of the 15th European Conference on Logics in Artificial Intelligence (JELIA 2016), held during November 9–11, 2016, in Larnaca, Cyprus, and organized by the University of Cyprus and the Open University of Cyprus.

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 proceedings published in the Springer series *Lecture Notes in Artificial Intelligence*. Previous meetings took place in Roscoff, France (1988), Amsterdam, The Netherlands (1990), Berlin, Germany (1992), York, UK (1994), Évora, Portugal (1996), Dagstuhl, Germany (1998), Málaga, Spain (2000), Cosenza, Italy (2002), Lisbon, Portugal (2004), Liverpool, UK (2006), Dresden, Germany (2008), Helsinki, Finland (2010), Toulouse, France (2012), and Madeira, Portugal (2014).

The aim of JELIA is to bring together active researchers interested in all aspects concerning the use of logics in artificial intelligence (AI) to discuss current research, results, problems, and applications of both theoretical and practical nature. JELIA strives to foster links and facilitate cross-fertilization of ideas among researchers from various disciplines, among researchers from academia and industry, and between theoreticians and practitioners.

The increasing interest in this forum, its international level with growing participation of researchers from outside Europe, and the overall technical quality have turned JELIA into a major biennial forum for the discussion of logic-based approaches to AI.

For the 2016 edition of JELIA, authors were invited to submit papers presenting original and unpublished research in all areas related to the use of logics in AI. To encourage a discussion of the links and synergies between AI and cognitive psychology, this year's edition of JELIA encouraged submissions on logics in AI and cognition, and included invited talks related to this topic.

There were 88 submissions, each reviewed by three Program Committee members. The committee decided to accept 32 full papers for regular presentations or system demonstrations, and ten short papers for spotlight/poster presentations. The accepted papers span a number of areas within logics in AI, including: belief revision, answer set programming, argumentation, probabilistic reasoning, handling inconsistencies, temporal logics and planning, description logics, and decidability and complexity results. The program also included five invited talks by Costas Bekas, Tarek R. Besold, Marc Denecker, Torsten Schaub, and Keith Stenning.

We would like to thank the authors of all the submitted papers and the members of the Program Committee and the additional experts who helped during the reviewing process, for contributing and ensuring the high scientific quality of JELIA 2016.

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Loizos Michael  
Antonis Kakas

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