

Preface

This volume contains the papers accepted at the 12th European Conference on Multi-Agent Systems (EUMAS 2014) held during December 18–19, 2014, in Prague, Czech Republic.

Multi-agent systems are systems of interacting, intelligent, and autonomous agents that pursue their goals alone, in collaboration with others, or against others. In order to solve complex problems, agents must have a variety of skills, e.g., they need to communicate and to negotiate with their peers and humans. Also, they need to be able to take good, often strategic, decisions. This requires sophisticated tools and techniques. Such being the case, the research field of multi-agent systems is very interdisciplinary with connections to, for example, logic, mathematics, economics, and psychology. Also, engineering aspects have been becoming increasingly important for the deployment of multi-agent systems for real-world and industrial applications.

This interdisciplinarity is very much in the spirit of EUMAS. Following the tradition of previous editions (Oxford 2003, Barcelona 2004, Brussels 2005, Lisbon 2006, Hammamet 2007, Bath 2008, Agia Napa 2009, Paris 2010, Maastricht 2011, Dublin 2012, Toulouse 2013), the aim of EUMAS 2014 was to encourage and support activity in the research and development of multi-agent systems, and to provide a forum for researchers from academia as well as from industry to meet, to present their work, and to discuss ideas in a friendly and professional environment. Sticking to these renowned traditions, this year's edition also brought a change: EUMAS 2014 was run, for the first time, as a conference, with formal proceedings in the form of an LNCS/LNAI volume—the present one.

As a consequence of the new format, the reviewing process was more selective when compared to previous editions. EUMAS 2014 attracted a good number of 79 submissions: 57 papers were submitted to the full paper track, 17 to the short paper track, and five additional submissions reported on already published work. Each submission was peer-reviewed by at least three members of the Program Committee which consisted of 80 top-level researchers and 22 additional reviewers who helped in the process. The reviewing process was selective: 21 papers were accepted as full papers and eight as short papers. The acceptance rate was 37 %. In addition to these papers, the proceedings includes abstracts of two invited talks, given by Michael Fisher (University of Liverpool, UK) on “Verifiable Autonomy – (how) can you trust your robots?” and by Carles Sierra (IIIA-CSIC, Spain) on “Agreement Computing,” respectively.

There are many people who helped to make EUMAS 2014 a successful event. First, I would like to thank all authors for submitting to EUMAS, all participants, the invited speakers, the members of the Program Committee, and the additional reviewers for putting together a strong program. Second, I would like to thank the EURAMAS board, especially Thomas Ågotnes (Chair of the EUMAS liaison) and Jordi Sabater-Mir (Chair of the EURAMAS board) for their support, and the Local Organizing Committee, especially the Local Chairs Michal Jakob and Jiri Vokrinek, for the great

organization of this event. Last but not least, I very much appreciate the financial support of the European Coordination Committee of Artificial Intelligence (ECCAI, <http://www.eccai.org>) for sponsoring the invited speakers and, on behalf of the local organizers, the financial support of the Office of Naval Research (Global Collaborative Support Program Grant No. N62909-15-1-C008)—many thanks to these sponsors!

I hope you enjoy reading.

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