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AI*IA 2013: Advances in Artificial Intelligence

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This volume is dedicated to Leonardo Lesmo,
colleague, friend, mentor to so many of us.

Preface

AI*IA 2013 was the thirteenth in a series of international conferences on Advances in Artificial Intelligence, held bi-annually in Italy by the Italian Association for Artificial Intelligence (AI*IA). The first edition of the conference was held in Trento in 1989, then in Palermo 1991, Turin 1993, Florence 1995, Rome 1997, Bologna 1999, Bari 2001, Pisa 2003, Milan 2005, Rome 2007, Reggio Emilia 2009, Palermo 2011.

The 2013 edition of the conference was special as it celebrated the 25th anniversary of AI*IA, founded in February 1988. Turin was honored to host again this event in this very special year and so to host also the celebrations. For this important occasion, the conference format was re-designed so as to better accomplish the mission of a conference, i.e. creating a meeting place that favors the exchange of ideas.

A special day was also organized on December, 4th, 2013. The former and current presidents of the association (Luigia Carlucci Aiello, Oliviero Stock, Pietro Torasso, Roberto Serra, Marco Gori, Marco Schaerf, and Paola Mello), provoked by the journalist and scientific popularizer Andrea Vico, enlivened a panel discussion on their respective chairing stints, the challenges, the priorities, and the achieved results as well as current directions and the future of Artificial Intelligence in Italy.

In the late afternoon, the movie Blade Runner was projected at Cinema Massimo with the aim of attracting a broad public towards Artificial Intelligence research, by relying on an artistic rather than a technical language. Many times research in Artificial Intelligence gave precious cues to cinema productions looking for visions about the future. Blade Runner is an iconic example and for this reason it can, better than other movies, convey an interest towards AI. The projection was complemented by a discussion about the intersections of research and artistic productions, lead by prof. Lorenza Saitta, from the University of Piemonte Orientale Amedeo Avogadro, and prof. Roy Menarini, from the University of Udine. This special event was organized by Alessandro Mazzei and Vincenzo Lombardo with the help of the Department of Humanities, and of the Cinema Museum of Turin.

In order to foster discussion and to facilitate idea exchange, community creation, and collaboration, the conference became, in its 2013 edition, a "social" conference. In the time between acceptance and presentation, each paper had its own public web space and a forum, where authors moderated discussions on the topics of their research. Presentations at the conference, thus, had a deeper impact: by attending the conference, researchers had the chance to tighten the relationships their papers started on the web, by means of vis-à-vis discussions. On this occasion, they had the chance to profit from reserved tables, where they met a motivated and interested audience, composed of other researchers, stake-

holders from the industrial world, and students. Attendees had the possibility to book directly with authors time slots for discussion, through the web, or to roam from table to table at the conference, browsing through discussions.

AI*IA 2013 received 86 submissions from 23 countries. Each submission was reviewed by at least 3 Program Committee members. The Committee decided to accept 45 papers. They are grouped in this volume in eight areas: knowledge representation and reasoning, machine learning, natural language processing, planning, distributed artificial intelligence: robotics and multi-agent systems, recommender systems and semantic web, temporal reasoning and reasoning under uncertainty, artificial intelligence applications. AI*IA 2013 was honored to host also two invited speakers: prof. Giuseppe Attardi, from the University of Pisa, and prof. Rafael H. Bordini, from the Pontificia Universidade Católica do Rio Grande do Sul.

We would like to thank all the authors for their participation and the members of the Program Committee for their excellent work during the reviewing phase. Moreover, we would like to thank all the members of the Steering Committee of AI*IA for their advice, a special thanks to Fabrizio Riguzzi, and Sara Manzoni also for their support in the organization. Finally, we are very grateful to prof. Paola Mello for her personal involvement and constant encouragement all along the months which led to AI*IA 2013.

This event was sponsored by AI*IA, by the Department of Computer Science of the University of Torino, and by the Artificial Intelligence Journal, and it obtained the "patrocinio" by Regione Piemonte. The submission, revision, and proceeding preparation phases were supported by EasyChair.

September 2013

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