Guest editorial

Special issue: Selected papers from the 15th International Conference of the Italian Association for Artificial Intelligence

This volume collects extended and revised versions of the best contributions presented at the *15th Conference of the Italian Association for Artificial Intelligence (AI*IA 2016)*, held in Genova, Italy, from November 28th to December 1st, 2016.[1] The Italian Association for Artificial Intelligence (AI*IA) has organized this event since 1989, bi-annually, until 2014, when it has become annual.

Since its foundation in 1988, AI*IA has been a relevant actor and testimony, in Italy as well as in Europe, of the apparently wavy evolution of AI. The association has gone through the late 80's/early 90's world-wide explosion with the associated over-expectations, followed by years of consolidation, maturation and, partly, of disillusion, roughly corresponding to the turn of the century and to its first decade. It is now enjoying the present AI renaissance, in which the discipline has become a first-page topic, thanks to a probably belated recognition of its potential, once technology has permitted to make many of the AI dreams come true and be part of our everyday life. The proceedings of the international conference of the AI*IA, published over this rather long time, however, demonstrate how steady and consequential the evolution of AI has been along the years, and how its ups and downs are mostly related to the way it has been looked upon 'from outside'.

The programme committee of the fifteenth edition of the conference selected 39 papers for presentation in its main track. The General and Program chairs analyzed a small set of papers that received particularly good reviews and selected three of them, following a further review process, for inclusion in this special issue.

I-DLV: the new Intelligent Grounder of DLV by Francesco Calimeri, Davide Fuscà, Simona Perri and Jessica Zangari, presents the I-DLV grounder for Answer Set Programming (ASP). I-DLV extends the well-known ASP grounder DLV in order to, e.g., fully support the ASP-Core-2 standard language. The authors also present the results of proper experimental activities for assessing both applicability and performance of I-DLV.

Reasoning About Plausible Scenarios in Description Logics of Typicality by Gian Luca Pozzato, presents decision procedures for two extensions of the nonmonotonic logic of typicality $\mathcal{ALC} + \mathbf{T_R}$. The entailment problem is showed to be in ExpTime for both extensions.

`cplint` *on SWISH: Probabilistic Logical Inference with a Web Browser* by Marco Alberti, Elena Bellodi, Giuseppe Cota, Fabrizio Riguzzi and Riccardo Zese, presents advances and new features of `cplint` on SWISH, which is a web application that allows users to perform reasoning tasks on probabilistic logic programs. In particular, the paper reports about the capability of drawing the binary decision diagrams created during the inference processes.

We would like to thank all members of the AI*IA 2016 Program Committee for their effort in the review process, that was fundamental for maintaining the high scientific level of the event, and the Editorial Board members of the journal, who managed the second review process. We also would like to thank the AI*IA council, and all the researchers of the Artificial Intelligence community who supported this event by submitting their work and actively participating in it. Finally, we would like to express our gratitude to Fabrizio Riguzzi, Editor in Chief of *Intelligenza Artificiale*, for hosting this special issue.

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[1] http://www.aixia2016.unige.it/

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