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STAIRS 2014

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Symposium

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Preface

These are the proceedings of the 7th European Starting AI Researcher Symposium (STAIRS), held as a satellite event of the 21st European Conference of Artificial Intelligence (ECAI) in Prague, Czech Republic, on 18th and 19th of August 2014. STAIRS is aimed at young researchers in Europe and beyond, particularly PhD students. It provides an opportunity to go through the experience of submitting to and presenting at an international event with a broad scientific scope.

The Call for Papers was soliciting submissions from all areas of AI, ranging from foundations to applications. Topics of interest for STAIRS include autonomous agents and multiagent systems; constraints, satisfiability, and search; knowledge representation, reasoning, and logic; machine learning and data mining; planning and scheduling; uncertainty in AI; natural language processing; as well as robotics, sensing, and vision. That is, the scope of STAIRS is the same as that of the major international conferences in AI. What sets STAIRS apart is that the principal author of every submitted paper must be a young researcher who either does not yet hold a PhD or who has obtained their PhD less than one year before the paper submission deadline.

We received a total of 45 submissions. All of them were carefully reviewed by the STAIRS Programme Committee, consisting of leading European researchers who together cover the depth and breadth of the field of AI. We are very grateful for the great service provided by these colleagues, as well as by the additional reviewers assisting them in their task. In the end, 16 papers were accepted for oral presentation at the symposium, and a further 14 for presentation during a poster session. These 30 accepted papers are included in this volume.

The body of submitted papers together covers the field of AI well, with knowledge representation and reasoning, machine learning, and planning and scheduling being the areas attracting the largest numbers of submissions. The problems tackled range from classical AI themes such as search, all the way to emerging research trends, e.g., at the interface of AI with economics. Also in terms of the foundations/application divide the STAIRS programme covers the full spectrum.

Besides the presentation of contributed papers and posters, the STAIRS programme will feature two keynote talks. On the first day of the symposium, Michael Wooldridge, Professor of Computer Science at the University of Oxford, UK, will offer an introduction to characterisation results for equilibria in repeated games and the significance of such results to multiagent systems. On the second day, Francesca Rossi, Professor of Computer Science at the University of Padova, Italy, will talk about new approaches to sentiment analysis, harnessing modern techniques from AI, such as preference reasoning and computational social choice. We thank both of them for accepting our invitation.

We are looking forward to an exciting two days in Prague, and we hope that readers of this volume will find it as useful as we have in getting an impression of current developments in our field.

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