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21st European Conference on Artificial Intelligence
18–22 August 2014, Prague, Czech Republic

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Proceedings

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Organized by the

European Coordinating Committee for Artificial Intelligence (ECCAI)

Hosted by the

Czech Technical University, Prague, Czech Republic

IOS
Press

Amsterdam • Berlin • Tokyo • Washington, DC

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ISBN 978-1-61499-418-3 (print)

ISBN 978-1-61499-419-0 (online)

Library of Congress Control Number: 2014944112

Publisher

IOS Press BV

Nieuwe Hemweg 6B

1013 BG Amsterdam

Netherlands

fax: +31 20 687 0019

e-mail: order@iospress.nl

Distributor in the USA and Canada

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PRINTED IN THE NETHERLANDS

Introduction

This volume contains the proceedings of the Twenty-first European Conference on Artificial Intelligence (ECAI'14), held from August 18 to 22, 2014 in Prague, Czech Republic. Since 1974, the biennial European Conference on Artificial Intelligence, organized by the European Coordinating Committee for Artificial Intelligence (ECCAI), has been the premier venue for presenting AI research in Europe. ECAI is the place for researchers and practitioners of Artificial Intelligence (AI) to gather and to discuss the latest trends and challenges in all subfields of AI as well as to demonstrate innovative applications and uses of advanced AI technology.

As in past editions, ECAI'14 was accompanied by the Conference on Prestigious Applications of Intelligent Systems (PAIS 2014), from which the papers are also included in this volume, and the Starting AI Researcher Symposium (STAIRS), the papers of which are published in a separate volume. Moreover, the program of ECAI'14 includes four invited plenary talks, several invited talks in the “Frontiers of Artificial Intelligence” track, as well as an extensive workshop and tutorial program.

In total, 611 papers were submitted to ECAI'14, viz. 562 long and 49 short papers. Of these, 158 (28%) and 20 (41%) were accepted, respectively, as well as 89 long papers, which were accepted as short papers. Similar to previous ECAI conferences, the largest areas of submission were ‘Knowledge Representation, Reasoning, and Logic’, followed by ‘Agent-based and Multi-agent Systems’ and ‘Machine Learning and Data Mining’.

I was lucky to be part of a wonderful and highly dedicated team: I would like to thank Marina De Vos and Karl Tuyls for putting in place an extensive workshop program, Agostino Dovier and Paolo Torroni for attracting exciting tutorials, João Leite and Ulle Endriss for their devotion to STAIRS'14, and last but not least Gerhard Friedrich and Barry O’Sullivan for chairing PAIS'14 as well as organizing the system demonstration track. I would also like to thank the local organizers Vladimír Mařík, Olga Štěpánková, and Filip Železný for our constructive collaboration. A special thanks goes to Zuzana Šeps for having always been there when needed! I also benefited a lot from the experience, material, and advice obtained from my two predecessors, Luc De Raedt and Michael Wooldridge. Similarly, I would like to thank the members of the ECCAI board for their advice and guidance. I am indebted to Thomas Preuss for his constant support with ConfMaster. Of course, it goes without saying that my life would have been truly miserable without the great support of my group: Holger Jost, Philip Obermeier, Javier Romero, Orkunt Sabuncu, Roland Kaminski, Benjamin Andres, and Max Ostrowski. And finally, thanks to all PC and SPC members, reviewers, sponsors, and all authors who submitted to ECAI'14.

See you all in Prague!

Torsten Schaub, June 2014

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