Lecture Notes in Artificial Intelligence 11311

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Max Bramer · Miltos Petridis (Eds.)

Artificial Intelligence XXXV

38th SGAI International Conference on Artificial Intelligence, AI 2018
Cambridge, UK, December 11–13, 2018
Proceedings

Springer

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ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Artificial Intelligence
ISBN 978-3-030-04190-8 ISBN 978-3-030-04191-5 (eBook)
https://doi.org/10.1007/978-3-030-04191-5

Library of Congress Control Number: 2018961017

LNCS Sublibrary: SL7 – Artificial Intelligence

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

This volume, entitled *Artificial Intelligence XXXV*, comprises the refereed papers presented at AI-2018, the thirty-eighth SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence, held in Cambridge in December 2018, in both the technical and the application streams. The conference was organized by SGAI, the British Computer Society Specialist Group on Artificial Intelligence.

The technical papers included here present new and innovative developments in the field, divided into sections on "Neural Networks," "Planning and Scheduling," and "Machine Learning." This year's Donald Michie Memorial Award for the best refereed technical paper was won by a paper entitled "Secure Third-Party Data Clustering Using Φ Data: Multi-User Order-Preserving Encryption and Super Secure Chain Distance Matrices" by Nawal Almutairi (University of Liverpool, UK, and King Saud University, Saudi Arabia), Frans Coenen, and Keith Dures (University of Liverpool, UK).

The application papers included present innovative applications of AI techniques in a number of subject domains. This year, the papers are divided into sections on "Industrial Applications of Artificial Intelligence," "Planning and Scheduling in Action," "Machine Learning in Action," "Applications of Machine Learning," and "Applications of Agent Systems and Genetic Algorithms."

This year's Rob Milne Memorial Award for the best refereed application paper was won by a paper entitled "Beat the Bookmaker – Winning Football Bets with Machine Learning" by Johannes Stübinger (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany) and Julian Knoll (Technische Hochschule Nürnberg, Germany)

The volume also includes the text of short papers in both streams presented as posters at the conference.

On behalf of the conference Organizing Committee, we would like to thank all those who contributed to the organization of this year's programme, in particular the Programme Committee members, the Executive Programme Committees, and our administrators Mandy Bauer and Bryony Bramer.

October 2018

Max Bramer
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