Hujun Yin · David Camacho ·
Peter Tino (Eds.)

# Intelligent Data Engineering and Automated Learning – IDEAL 2022

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23rd International Conference, IDEAL 2022
Manchester, UK, November 24–26, 2022
Proceedings

Springer

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# Preface

The International Conference on Intelligent Data Engineering and Automated Learning (IDEAL) is an annual international conference dedicated to emerging and challenging topics in intelligent data analytics and associated machine learning paradigms and systems. The conference provides a sample of current trends and a unique and stimulating forum for presenting and discussing the latest theoretical advances and real-world applications.

After last year's virtual event, the 23rd edition, IDEAL 2022, was held in Manchester, UK, during November 24–26 in hybrid mode. Given the uncertainties and many travel difficulties, a hybrid event appeared to be practical and best for the time being, like many other similar conferences.

For the past two decades, IDEAL has served an important role in the data analytics, machine learning, and AI communities. The conference aims to bring together researchers and practitioners to present their latest findings, disseminate state-of-the-art results, and share experiences and forge alliances on tackling many real-world challenging problems. During the difficult and turbulent past two years, the IDEAL conference continued to play its role in these communities. The core themes of IDEAL 2022 included big data challenges, machine learning, deep learning, data mining, information retrieval and management, bio-/neuro-informatics, bio-inspired models, agents and hybrid intelligent systems, and real-world applications of intelligence techniques and AI.

In total, 52 papers were accepted and presented at IDEAL 2022, which were selected from nearly 80 submissions. Our Program Committee did a sterling job in providing timely and useful feedback and peer reviews for all the submissions, with each paper receiving three-blind reviews. In addition to the IDEAL 2022 main track, there were a number of special sessions as listed on the IDEAL 2022 website. We would also like to thank the special sessions chairs, Antonio J. Tallón-Ballesteros, Teresa Gonçalves, Vítor Nogueira and Fernando Nuñez Hernandez, and the publicity chairs, Bing Li, Guilherme Barreto, Jose A. Costa, and Yimin Wen, for their great efforts. Our distinguished keynote speakers, Paolo Rosso, Ioannis (Yiannis) Kompatsiaris and Barbara Hammer were also greatly appreciated for their outstanding lectures.

We would like to thank the IEEE UK and Ireland CIS Chapter for their technical co-sponsorship. We would also like to thank all the people who devoted so much time and effort to the successful running of the conference, in particular the members of the Program Committee and reviewers and organisers of the Special Sessions, as well as the authors who contributed to the conference.

Finally, we are grateful for the hard work by the local organising team at the University of Manchester, especially Yating Huang, and our event management collaborators,

Magnifisense, in particular Lisa Carpenter and Gail Crowe. Continued support, collaboration, and sponsorship for the best paper awards from Springer LNCS are also greatly appreciated.

October 2022

Hujun Yin
David Camacho
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