

Lecture Notes in Networks and Systems

Volume 541

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The International Conference on Deep Learning, Big Data and Blockchain (DBB 2022)

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ISSN 2367-3370

ISSN 2367-3389 (electronic)

Lecture Notes in Networks and Systems

ISBN 978-3-031-16034-9

ISBN 978-3-031-16035-6 (eBook)

<https://doi.org/10.1007/978-3-031-16035-6>

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

Preface

It was a great pleasure to welcome all the participants of the 3rd International Conference on Deep Learning, Big Data and Blockchain (DBB 2022). The conference was held during August 22–24, 2022, in the historic city of Rome, Italy. Rome is one of the World Heritage sites, which attracts millions of visitors from all over the world. It is full of museums, squares, Roman landmarks and sights and other attractions such as shopping areas and restaurants.

The DBB 2022 conference involved hard work, time and commitment from the conference organizing and technical committees. The goal was to provide participants with an opportunity to share and exchange ideas on different topics related to the conference's theme, including machine/deep learning, blockchain, big data and their integration in modern applications and convergence in new and emerging research and development areas.

The call for papers of the conference included innovative and timely topics in the aforementioned areas and their sub-topics, such as learning-based models; clustering, classification and regression; data analysis, insights and hidden pattern; blockchain protocols and applications; verification; security and trust; and applications of deep learning, blockchain and big data in areas such as business, finance and healthcare among others. Blockchain and smart contract tools and methods are increasingly used in new and emerging systems to ensure transparency of data and transactions. For instance, machine learning techniques have been used by businesses in order to analyze a large volume of (big) data and to identify useful patterns in the data so that they can be used for purposes of intelligent and timely decision making.

The conference technical committee created a fascinating technical program to provide a forum where participants could present, discuss and provide constructive feedback on different aspects of deep learning, big data and blockchain.

Though the ongoing pandemic has affected the number of submissions, the DBB conference has attracted many good-quality papers from different countries worldwide. The conference followed a rigorous review process wherein all submitted papers were reviewed by multiple members of the technical program

committee. Based on the reviews, ten papers were accepted for the conference, which gave an acceptance rate of 34% of the total submissions.

The accepted papers included interesting work on different topics such as deep learning and biologically inspired methods; security, privacy and trust; blockchain algorithms and protocols; smart contracts; re-enforcement learning; smart video surveillance systems; identifying illicit accounts; and stake consensus protocol. The papers also included work on practical applications such as clinical trials, crime detection, and financial applications and transactions.

We sincerely thank all the members of the program committee who have spent their valuable time reviewing the submitted papers and providing useful feedback to the authors. We were also thankful to all the authors for their contributions to the conference.

We were grateful to the conference organizers: General Chair, Prof Salima Benbernou; Workshop Coordinator, Dr. Filipe Portela; Publicity Chair, Dr. Mourad Ouziri; and Journal Special Issue Coordinator, Prof Natalia Kryvinska.

We sincerely thank Springer's team for the time and support they provided throughout the production of the conference proceedings.

August 2022

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