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Christoph Quix · Jorge Bernardino (Eds.)

Data Management Technologies and Applications

7th International Conference, DATA 2018
Porto, Portugal, July 26–28, 2018
Revised Selected Papers

Editors

Christoph Quix
RWTH Aachen University
Aachen, Nordrhein-Westfalen, Germany

Jorge Bernardino
University of Coimbra
Coimbra, Portugal

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Preface

The present book includes extended and revised versions of a set of selected papers from the 7th International Conference on Data Science, Technology and Applications (DATA 2018), held in Porto, Portugal, during July 26–28, 2018.

DATA 2018 received 69 paper submissions from 26 countries, of which 13% are included in this book. The papers were selected by the event chairs and their selection is based on a number of criteria that include the classifications and comments provided by the Program Committee members, the session chairs' assessment, and also the program chairs' global view of all papers included in the technical program. The authors of selected papers were then invited to submit a revised and extended version of their papers having at least 30% innovative material.

“Value of Data in a Data-Driven Economy” was the theme of the 7th International Conference on Data Science, Technology and Applications (DATA), whose purpose was to bring together researchers, engineers, and practitioners interested in databases, big data, data mining, data management, data security and other aspects of information systems and technology involving advanced applications of data.

The nine papers selected to be included in this book contribute to the understanding of relevant trends of current research on data science, technology and applications. There are three papers addressing the topic of databases and data security focusing on query processing and optimization, database architecture and performance, architectural concepts, data privacy and security, big data as a service, and NoSQL databases. Another three papers address the topic of soft computing in data science focusing on data mining, semi-structured and unstructured data, text analytics, data science, neural network applications, predictive modelling, evolutionary computing and optimization, hybrid methods, and deep learning. There are two papers on the topic of business analytics, focusing on datamining, data analytics, predictive modelling, industry 4.0, decision support systems, and statistics exploratory data analysis. Finally, we have one paper approaching the important aspect of data management and quality including data modelling and visualization, information visualization, and data science.

We would like to thank all the authors for their contributions and also to the reviewers who helped ensure the quality of this publication.

July 2018

Christoph Quix
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Invited Speakers

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Tova Milo	Tel Aviv University, Israel

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