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Recent Advances on Soft Computing and Data Mining

Proceedings of the Third International Conference on Soft Computing and Data Mining (SCDM 2018), Johor, Malaysia, February 06–07, 2018

Springer

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Preface

Rapid advancements in data collection and storage technology have enabled the access to vast amount of data. However, extracting useful information has proven extremely challenging. This is due to the fact that more complex systems arising are often remained intractable to conventional mathematical and analytical methods. For this, data mining which supports a wide range of business intelligence applications has opened up opportunities for exploring and analyzing various type of data. With the deployment of data and soft computing techniques to scour large database, novel and useful patterns can be found, otherwise remain unknown. Soft computing which refers to a consortium of computational techniques in computer science can deal with imprecision, uncertainty, partial truth, and approximation to achieve tractability, robustness, and low solution cost. Soft computing tools, individually or in integrated manner, are turning out to be strong candidates for performing tasks in the area of data mining, decision support systems, supply chain management, medicine, business, financial systems, automotive systems and manufacturing, image processing and data compression, etc.

The SCDM 2018 is so significant in a sense that it starts off a host of activity which collaborates Faculty of Computer Science and Information Technology, Universiti Tun Hussein Onn Malaysia (UTHM), and Soft Computing and Data Mining research group. After the success of our two previous SCDM conferences in 2014 until 2016, we hope to continuously moving on this journey of success through this third international conference. Indeed, we are honored to host this event and the fact that we are getting more papers, commitments, contributions, and partnerships that indicates a continuous support from researchers throughout the globe.

The SCDM 2018, with the theme "Concise and Informative" was held in Johor Baharu Malaysia on August 6–7, 2018. We received 75 paper submissions from 13 countries around the world. The conference also approved three special sessions that are Intelligent Human-Centred Computing; Web Mining and Content Analytics; and Web Mining, Services, and Security. Each paper in regular submission and special sessions was screened by the Proceeding's Chair and carefully peer-reviewed by two experts from the Program Committee. Finally, only 49 papers

with the highest quality and merit were accepted for oral presentation and publication in this volume proceeding, giving an acceptance rate of 65%.

The papers in this proceeding are grouped into five tracks:

- Soft Computing
- Data Mining
- Intelligent Human-Centred Computing
- Web Mining and Content Analytics
- Web Mining, Services, and Security

On behalf of SCDM 2018, we would like to express our highest gratitude to the Faculty of Computer Science and Information Technology, UTHM, and also to Soft Computing and Data Mining research group, Steering Committee, Conference Chair, Program Committee Chair, Organizing Chairs, Special Session Chair, all Program and Reviewer Committee members for their valuable efforts in the review process that helped us to guarantee the highest quality of the selected papers for the conference.

We would also like to express our thanks to the four keynote speakers, Dr. Dzaharudin Mansor from Microsoft Malaysia, Assoc. Prof. Dr. David Taniar from Monash University, Prof. Junzo Watada from Waseda University, Japan, and Prof. Dr. Mustafa Mat Deris from Universiti Tun Hussein Onn Malaysia. Our special thanks are also due to Mr. Suresh Rettagunta and Dr. Thomas Ditzinger for publishing the proceeding in Advances in Intelligent Systems and Computing, Springer. We wish to thank the members of the Organizing and Student Committees for their very substantial work, especially those who played essential roles.

Lastly, we cordially thank all the authors for their valuable contributions and other participants of this conference. The conference would not have been possible without them.

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