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# Soft Computing in Data Science

5th International Conference, SCDS 2019  
Iizuka, Japan, August 28–29, 2019  
Proceedings



# Preface

We are pleased to present the proceeding of the Fifth International Conference on Soft Computing in Data Science 2019 (SCDS 2019). SCDS 2019 was a collaboration with Kyushu Institute of Technology and was held at the Centre of Iizuka Research and Development, in Iizuka, Japan, during August 28–29, 2019. The theme of the conference was “Science in Analytics: Harnessing Data and Simplifying Solutions.” SCDS 2019 aimed to provide a platform for knowledge sharing on theory and applications of advanced technologies and techniques for Big Data Analytics (BDA). Universities play an important role in producing data professionals and data scientists who are in great demand by the industries which need to harness their data to gain competitive advantage and to improve their business process, efficiency, and productivity.

The papers in this proceeding cover the issues, challenges, theory, and innovative applications of data science and big data analytics including, but not limited to: data capture and storage; information and customer analytics; data visualization; image processing; data mining tools and techniques; big data technologies; machine learning and deep learning algorithms for big data. For the advancement of society in the 21st century, there is a need to transfer knowledge and technology to industrial applications to solve real-world problems that benefit the global community. Research collaborations between academia and industry can lead to the advancement of innovative analytics and computing applications to facilitate real-time insights and solutions.

We were delighted this year to have received paper submissions from a diverse group of national and international researchers. We received 75 paper submissions, among which 30 were accepted. SCDS 2019 utilized a double-blind review procedure. All accepted submissions were assigned to at least two independent reviewers in order to ensure a rigorous, thorough, and convincing evaluation process. A total of 74 reviewers were involved in the review process. The conference proceeding volume editors and Springer CCIS Editorial Board made the final decisions on acceptance, with 30 of the 75 submissions (40%) being published in the conference proceedings.

We would like to thank the authors who submitted manuscripts to SCDS 2019. We thank the reviewers for voluntarily spending time to review the papers. We thank all conference committee members for their time, ideas, and efforts in ensuring the success of SCDS 2019. We also wish to thank the Springer CCIS Editorial Board, organizations, and sponsors for their continuous support. We sincerely hope that SCDS 2019 has provided a venue for knowledge sharing, publication of good research findings, and new research collaborations. Last but not least, we hope everyone gained from the keynote and parallel sessions, and had an enjoyable and memorable experience at SCDS 2019 and in Iizuka, Japan.

August 2019

Michael W. Berry  
Bee Wah Yap  
Azlinah Mohamed  
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