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Data Science

5th International Conference
of Pioneering Computer Scientists,
Engineers and Educators, ICPCSEE 2019
Guilin, China, September 20–23, 2019
Proceedings, Part I

Springer

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Preface

As the program chairs of the 5th International Conference of Pioneer Computer Scientists, Engineers and Educators 2019 (ICPCSEE 2019, originally ICYCSEE), it is our great pleasure to welcome you to the proceedings of the conference, which was held in Guilin, China, September 20–23, 2019, hosted by Guilin University of Technology, Guilin University of Electronic Technology, and National Academy of Guo Ding Institute of Data Science. The goal of this conference was to provide a forum for computer scientists, engineers, and educators.

The call for papers of this year's conference attracted 395 paper submissions. After the hard work of the Program Committee, 104 papers were accepted to appear in the conference proceedings, with an acceptance rate of 26.4%. The major topic of this conference was data science. The accepted papers cover a wide range of areas related to Basic Theory and Techniques for Data Science including Mathematical Issues in Data Science, Computational Theory for Data Science, Big Data Management and Applications, Data Quality and Data Preparation, Evaluation and Measurement in Data Science, Data Visualization, Big Data Mining and Knowledge Management, Infrastructure for Data Science, Machine Learning for Data Science, Data Security and Privacy, Applications of Data Science, Case Study of Data Science, Multimedia Data Management and Analysis, Data-Driven Scientific Research, Data-Driven Bioinformatics, Data-Driven Healthcare, Data-Driven Management, Data-Driven eGovernment, Data-Driven Smart City/Planet, Data Marketing and Economics, Social Media and Recommendation Systems, Data-Driven Security, Data-Driven Business Model Innovation, and Social and/or Organizational Impacts of Data Science.

We would like to thank all the Program Committee members, 203 coming from 93 institutes, for their hard work in completing the review tasks. Their collective efforts made it possible to attain quality reviews for all the submissions within a few weeks. Their diverse expertise in each individual research area helped us to create an exciting program for the conference. Their comments and advice helped the authors to improve the quality of their papers and gain deeper insights.

Great thanks should also go to the authors and participants for their tremendous support in making the conference a success.

We thank Dr. Lanlan Chang and Jane Li from Springer, whose professional assistance was invaluable in the production of the proceedings.

Besides the technical program, this year ICPCSEE offered different experiences to the participants. We hope you enjoy the conference proceedings.

June 2019

Xiaohui Cheng
Rui Mao

Organization

The 5th International Conference of Pioneering Computer Scientists, Engineers and Educators (ICPCSEE, originally ICYCSEE) 2019 (http://2019.icpcsee.org) was held in Guilin, China, during September 20–23 2019, hosted by Guilin university of Technology, Guilin University of Electronic Technology, and National Academy of Guo Ding Institute of Data Science.

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