Lecture Notes in Computer Science

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Knowledge Science, Engineering and Management

17th International Conference, KSEM 2024 Birmingham, UK, August 16–18, 2024 Proceedings, Part II



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Preface

This five-volume set contains the papers presented at the 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024), held during August 16–18, 2024, in Birmingham, UK.

There were 495 submissions. Each submission was reviewed by at least 3 reviewers, and on average 3.5 Program Committee members. The committee decided to accept 132 regular papers and 28 special track papers, a total of 160 papers. We will separate the proceeding into five volumes: LNAI 14884, 14885, 14886, 14887 and 14888. The regular paper acceptance rate is 27%.

KSEM 2024 was the 17th in this series of conferences started in 2006. The aim of this interdisciplinary conference is to provide a forum for researchers in the broad areas of knowledge science, knowledge engineering and knowledge management to exchange ideas and to report state-of-the-art research results. KSEM is in the list of CCF (China Computer Federation) recommended Conferences (C series, Artificial Intelligence).

KSEM 2024 was held in Birmingham, UK, following the traditions of the 16 previous successful KSEM events in Guilin, China (KSEM 2006); Melbourne, Australia (KSEM 2007); Vienna, Austria (KSEM 2009); Belfast, UK (KSEM 2010); Irvine, USA (KSEM 2011); Dalian, China (KSEM 2013); Sibiu, Romania (KSEM 2014); Chongqing, China (KSEM 2015); Passau, Germany (KSEM 2016); Melbourne, Australia (KSEM 2017); Changchun, China (KSEM 2018); Athens, Greece (KSEM 2019); Hangzhou, China (KSEM 2020); Tokyo, Japan (KSEM 2021); Singapore (KSEM 2022); and Guangzhou, China (KSEM 2023).

We would like to express our gratitude to the honorary chairs and the KSEM Steering Committee chairs, Ruqian Lu (Chinese Academy of Sciences, China) and Dimitris Karagiannis (University of Vienna, Austria), and the members of the Steering Committee, who provided insight and guidance during all the stages of this effort. The KSEM 2024 general co-chairs, Yonghao Leo Wang (Birmingham City University, UK), Gerard Memmi (Télécom Paris, France), and Meikang Qiu (Augusta University, USA), were extremely supportive in the conference organizing, call for paper, paper review, and the general success of the conference. The program chairs, Sun-Yuan Kung (Princeton University, USA), Cungen Cao (Chinese Academy of Sciences, China), Chen Huajun (Zhejiang University, China), Liang Zhao (Emory University, USA), Junaid Arshad (Birmingham City University, UK), Taufiq Asyhari (Monash University, Australia) and Zhipeng Cai (Georgia State University, USA) led the peer-review and proceedings building of KSEM 2024 with amazing amounts of efforts.

The objective of KSEM 2024 was to bring together researchers and practitioners from academia, industry, and governments to advance the theories and technologies in Knowledge Science, Engineering and Management. KSEM 2024 focused on three broad areas, i.e., Knowledge Science with Learning and AI (KSLA, LNAI 14884), Knowledge

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Engineering Research and Applications (KERA, LNAI 14885), and Knowledge Management with Optimization and Security (KMOS, LNAI 14886). We have one volume for Emerging Tech (LNAI 14887) and one volume for the Special Track (LNAI 14888).

We would like to thank the conference sponsors: Springer LNAI and Birmingham City University, UK.

August 2024

Cungeng Cao Huajun Chen Liang Zhao Junaid Arshad Taufiq Asyhari Yonghao Wang

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