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Introduction

The 2024 Third International Symposium on Computer Applications and Information Systems (ISCAIS 2024) was held during March 22nd-24th, 2024 in Wuhan, China (hybrid conference), bringing together about 200 experts, scholars, researchers and related practitioners in the fields of computer applications and information systems from around the world to share the latest research results, discuss hot issues, and exchange new experiences and technologies.

Technological advancements at an exceptional rate could only take place by exchanging thoughts, ideas, innovations, problems, and real-time solutions to the problems and technologies. ISCAIS 2024 has provided such a platform for scholars and researchers working in the fields of and related to computer applications and information systems from all over the globe.

The Conference kindled valuable discussions on the technological advancements, recent trends, various issues of sustainability, and the solutions adopted to address these issues in the fields related to computer applications and information systems by embodying innovative ideas and pivoting advanced technologies. Emphasis was attributed to but not limited to the following topics: Computational Intelligence; Applications of Blockchain Technology; Information Systems Planning and Management; Hybrid Intelligent Systems; and System Analysis and Design Methods.

The Conference was made stimulating and informative by wonderful speeches and presentations delivered by the pioneers of related fields from different corners of the world. Among this wonderful array of addresses, we are honored to have invited Prof. Ping Wang (York University, Canada), Prof. Hongzhi Wang (Harbin Institute of Technology, China), Prof. Xin Xu (Wuhan University of Science and Technology, China), Prof. Yulin Wang (Wuhan University, China), and Prof. Qiang Chen (Nanjing University of Science and Technology, China) to be our keynote speakers. Among them, Prof. Hongzhi Wang made a speech on Data Management for Cloud-Edge-Device Collaboration, conducting in-depth research on the new data management theories and key technologies of cloud edge collaboration, and focusing the discussion on the three key scientific issues of polymorphic collaboration, efficient balance, and dynamic availability in cloud edge collaborative data management. And the attendees interacted actively with the speakers and each other, raising questions and exchanging views on the topics concerned.

We would like to address our sincere thanks to the eminent speakers, authors, the committee members, reviewers, participants, the esteemed associates of the Conference, and all the members who have supported the Conference. Special acknowledgement to the staff of Society of Photo-Optical Instrumentation Engineers for all their efforts in the publication of this volume.

The Committee of ISCAIS 2024