The 2022 IEEE International Conference on Data, Information, Knowledge and Wisdom (DIKW-2022)

Dec. 18-20, 2022, Chengdu, China

Call for Papers

Data, Information, Knowledge and Wisdom, in short (DIKW), have been used widely as marking terms in various domains for expressing and exchanging semantic or conceptual subjective or objective understandings. However, there are still no unified understandings over the meaning of the DIKW concepts. Data, Information, Knowledge, and Wisdom as a whole concept of DIKW is also missing unified understandings of the relationships among them. Therefore, there have been proposals and models of DIKW as "layered hierarchy", "architecture", "framework", "network", "thinking mode", "pattern", "style", "theory", "methodology", "model", "graph", etc.

2022 International Conference on Data, Information, Knowledge and Wisdom (DIKW-2022) will be held on 18th-20th December 2022 at Chengdu, China, which is co-organized by Sichuan Association for Science and Technology and the DIKW research group of Sichuan University, aims to bring together scientists, researchers, and industrial engineers to exchange experimental and theoretical Data/Information/Knowledge/Wisdom modeling and processing results, novel designs, explainable AI, AI governance, work-in-progress and case studies on theories, design mechanisms and extensions on DIKW transformations and interactions in all areas, in all phases, empirical or theoretical solutions. We hope you will join us for the great gathering and look forwards to seeing you in the beautiful city Chengdu!

This conference will focus on (but not limited to) the following topics:

- Theories, Algorithms and Platforms for Data Analytics and Information Retrieving
- Data Provenance, Cleaning, Curation and Governance Services
- Data, Information, Knowledge and Wisdom Sharing, Integration and Migration
- Real-time Data Modeling and Information Provision Services and Applications
- Data-driven Intelligent Decision-making and Innovative Applications
- Goal or Purpose Models, Techniques and Tools for Smart Computing
- Data Models, Information Semantics, Query languages
- Data Stream Systems and Sensor Networks
- Data Visualization and Interactive Data Exploration
- Hybrid AI Privacy, Security, Trust, and Responsibility Provision
- Data-Knowledge Mixed Processing Systems and Service Architecture
- Domain Knowledge Modeling and Ontology-Building
- Data, Information and Knowledge Transformation Load balance
- DIKW content Storage and Retrieval and Interface Technology
- Software Tools for Data-Information-Knowledge Quality Modeling and Testing
- Computational Intelligence for Data, Information and Knowledge Hybrid Systems
- Multimedia and Cross-modals "Databases" Processing
- Development and Management of Heterogeneous Knowledge Bases
- Knowledge Extraction, Discovery, Analysis and Representation
- Application of Knowledge Representation Techniques to Semantic Modeling
- Optimization Techniques of DIKW applications
- Theories of DIKW Models and Performance Evaluation Approach

Paper Submission

Conference papers are limited to 8 pages (regular paper), 6 pages (short paper), 2-4 pages (poster paper), following the IEEE proceedings format.

Papers are to be submitted as PDF via the site: <u>Coming soon</u>

For further information, please visit our website: Coming soon

Paper Publication

Accepted conference papers will be published by IEEE (IEEE-DL and El indexed). At least one author of each accepted paper is required to register and present their work at the conference; Otherwise, the paper will not be included in the proceedings. Selected papers, after further extensions and revisions, will be recommended to special issues.

Co-located with Five Other Conferences

- o The 2022 IEEE Int' I Conf. on Embedded Software and Systems (ICESS-2022)
- o The 2022 IEEE Int' I Conf. on Smart City (SmartCity-2022)
- o The 2022 IEEE Int' I Conf. on Data Science and Systems (DSS-2022)
- o The 2022 IEEE Int' I Conf. on High Performance Computing and Communications (HPCC-2022)
- o The 2022 IEEE Int' I Conf. on Dependability in Sensor, Cloud and Big Data Systems and Applications (DependSys-2022)

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Special Session Jun. 30, 2022

Submission Deadline Sep. 01, 2022

Author Notification Oct. 15, 2022

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