

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

Dec. 18-20, 2022, Chengdu, China  
<http://www.ieee-cybermatics.org/2022/dikw/>

## 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 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

Each paper is limited to 8 pages(or 10 pages with over length charge)including figures and references using IEEE Computer Society Proceedings Manuscripts style (two columns, single spaced, 10 fonts). All papers need to be submitted electronically through the website with PDF:<https://edas.info/N29974>

## Paper Publication

Accepted conference papers will be published by IEEE (IEEE-DL and EI 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' l Conf. on Embedded Software and Systems (ICES-2022)
- o The 2022 IEEE Int' l Conf. on Smart City (Smart City-2022)
- o The 2022 IEEE Int' l Conf. on Data Science and Systems (DSS-2022)
- o The 2022 IEEE Int' l Conf. on High Performance Computing and Communications (HPCC-2022)
- o The 2022 IEEE Int' l Conf. on Dependability in Sensor, Cloud and Big Data Systems and Applications (DependSys-2022)

## Contacts

More details can be found via the conference website: <http://www.ieee-cybermatics.org/2022/dikw/>  
For any question please do not hesitate to contact: Jing Yang, email: [jingyang@hainanu.edu.cn](mailto:jingyang@hainanu.edu.cn)

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## Journal Special Issues

### 1.IEEE Transactions on Computational Social Systems

SI: Dark side of the Socio-Cyber World: Media Manipulation, Fake News, and Misinformation

### 2. IEEE Transactions on Computational Social Systems

SI: Responsible AI in Social Computing

### 3. Information Science

SI: Decentralized Trust Management with Intelligence

### 4.IEEE Transactions on Emerging Topics in Computational Intelligence

SI: Resource Sustainable Computational and Artificial Intelligence

### 5.IEEE Internet of Things Journal

SI: Smart Blockchain for IoT Trust, Security and Privacy

### 6.Journal of Systems Architecture

SI: Edge Computing Optimization and Security

### 7. Journal of Systems Architecture

SI: Distributed Learning and Blockchain Enabled Infrastructures for Next Generation of Big Data Driven Cyber-Physical Systems

### 8. ACM Transactions on Sensor Networks

SI: Distributed and Collaborative Learning Empowered Edge Intelligence in Smart City

### 9. Information Science

SI: Robustness, Privacy, and Forensics in Intelligent Multimedia Systems

### 10. Journal of Systems Architecture

SI: Embedded Software and Systems

Special Session  
Jun. 30, 2022

Submission Deadline  
Sep. 01, 2022 → Sep. 20, 2022

Author Notification  
Oct. 15, 2022

Final Manuscript Due  
Nov. 10, 2022

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