# CFP: The 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024)

August 16-18th, 2024
Birmingham
https://ksem24.ai-edge.net/

The 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024) will be held in Birmingham on August 16-18th, 2024. 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).

#### **Submission Process:**

Easychair System: https://easychair.org/my/conference?conf=ksem2024

### **Steering Committees**

- Ruqian Lu (Honorary Chair), Chinese Academy of Sciences, China
- Dimitris Karagiannis (Chair), University of Vienna, Austria
- Bo Yang, Jilin University, China
- Chengqi Zhang, University of Technology Sydney, Australia
- Christos Douligeris, University of Piraeus, Greece
- Claudiu Kifor, "Lucian Blaga" University of Sibiu, Romania
- Gang Li, Deakin University, Australia
- Hui Xiong, The State University of New Jersey, USA
- Jörg Siekmann, German Research Centre of Artificial Intelligence, Germany
- Martin Wirsing, Ludwig-Maximilians-Universität München, Germany
- Meikang Qiu, Augusta University, USA
- Xiaoyang Wang, Zhejiang Gongshang University, China
- Yaxin Bi, Ulster University, UK
- Yoshiteru Nakamori, Japan Advanced Institute of Science and Technology, Japan
- Yuncheng Jiang, South China Normal University, China
- Zhi Jin, Peking University, China
- · Zili Zhang, Southwest University, China

# **Organizing Committee**

- Honor General Chairs
- Ruqian Lu, Chinese Academy of Sciences, China
- Dimitris Karagiannis (Chair), University of Vienna, Austria
- General Co-Chairs
- Yonghao Leo Wang, Birmingham City University, UK
- Gerard Memmi, Telecom Paris, France
- Meikang Qiu, Augusta University, USA
- PC Co-Chairs
- Sun-Yuan Kung, Princeton University, USA
- Junaid Arshad, Birmingham City University, UK
- Taufiq Asyhari, Monash University, Australia

# **Important Dates**

Paper submission: January 15, 2024 Author notification: March 1st, 2024 Camera-Ready: May 1, 2024 Registration: May 1, 2024

Conference date: August 16-18th, 2024

# Contact Info

If you have any questions or queries on KSEM 2024, please contact us by email. Email address: <a href="mailto:ksem24@outlook.com">ksem24@outlook.com</a>

## **Topics**

The conference committee invites submissions of applied or theoretical research as well as of application-oriented papers on all the topics of KSEM. Topics include, but are not limited to the following:

### **Knowledge Science**

- Knowledge representation and reasoning
- Formal analysis of knowledge; reasoning about knowledge
- Knowledge complexity and knowledge onotonic reasoning
- Uncertainty in knowledge (randomness, fuzziness, roughness, vagueness)
- Knowledge fusion for decision making
- Formal ontologies
- Reasoning about knowledge in the presence of inconsistency, incompleteness and context-dependency
- Belief propagation, revision and aggregation
- Cognitive foundations of knowledge
- Integration of machine learning and knowledge representation
- Knowledge-driven learning
- Knowledge for cognitive robotics
- Knowledge for cognitive analytics
- Knowledge in complex systems (e.g. manufacture assembling, economical and quantum systems)
- Game-theoretical aspects of knowledge; knowledge in multi-agent systems

## **Knowledge Engineering**

- Knowledge modeling
- Knowledge acquisition, such as knowledge modules, temporal knowledge, etc.
- Knowledge extraction from texts/videos, big data/Web
- Knowledge discovery from very large databases
- Knowledge integration
- Knowledge-based software engineering
- Knowledge-based systems for smart homes
- Conceptual modeling in knowledge-based systems
- Semantic database systems
- Semantic Web: Content and ontological engineering
- Knowledge engineering applications
- Knowledge modeling for digital twins
- Knowledge-based system for Chatbot
- Knowledge-based system and Large Language Models (LLMs)

# **Knowledge Management**

- Knowledge management best practices and applications
- Knowledge verification and validation (e.g. Blockchain)
- Knowledge protection and attack detection
- Knowledge-Based Systems in Cybersecurity Threat Detection and Intelligent Decision-Making
- Smart knowledge and resource optimization
- Knowledge dissemination
- Knowledge management systems
- Knowledge and data integration
- Knowledge adaptation

### **Knowledge Graphs**

- Probabilistic Knowledge Graphs
- Knowledge graph construction
- Knowledge graph embedding





