# CFP: The 15th International Conference on Knowledge Science, Engineering and Management (KSEM 2022)

August 6-8, Singapore https://ksem22.smart-conf.net/

The 15th International Conference on Knowledge Science, Engineering and Management (KSEM 2022) will be held in Singapore on August 6-8, 2022. 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/conferences/?conf=ksem2022

### **Steering Committees**

• Ruqian Lu (Honorary Chair), Chinese Academy of Sciences, China

• Dimitris Karagiannis (Chair), University of Vienna, Austria

- Hui Xiong, The State University of New Jersey, USA
- Yaxin Bi, Ulster University, UK
- Zhi Jin, Peking University, China
- Claudiu Kifor, Sibiu University, Romania
- Gang Li, Deakin University, Australia
- Yoshiteru Nakamori, Japan Advanced Institute of Science and Technology, Japan
- Jorg Siekmann, German Research Centre of Artificial Intelligence, Germany
- Martin Wirsing, Ludwig-Maximilians-Universität München, Germany
- Bo Yang, Jilin University, China
- Chengqi Zhang, University of Technology Sydney, Australia
- Zili Zhang, Southwest University, China
- Christos Douligeris, University of Piraeus, Greece
- Xiaoyang Wang, Zhejiang Gongshang University, China
- Meikang Qiu, Texas A&M University Commerce, USA

## **Organizing Committee**

- Honor General Chairs
- Ruqian Lu, Chinese Academy of Sciences, China
  Dimitris Karagiannis (Chair), University of Vienna, Austria

### - General Co-Chairs

- Ruby B. Lee, Princeton University, USA
- Tianwei Zhang, Nanyang Technological University, Singapore
- Yaxin Bi, Ulster University at Jordanstown, UK
- PC Co-Chairs
- Baijian Yang, Purdue University, USA
- Linghe Kong, Shanghai Jiao Tong University, China
- Gerard Memmi, Telecom Paris, France

## **Important Dates**

Paper submission: April 5, 2022 Author notification: May 15, 2022

Camera-Ready: June 1, 2022 Registration: June 1, 2022 Conference date: August 6-8, 2022

## **Contact Info**

If you have any questions or queries on KSEM 2022, please contact us by email. Email address: <u>ksem22@outlook.com</u>



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### 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 metrics
- Common sense knowledge; non-monotonic 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 graphs

### **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 in life sciences
- 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 Management**

- Knowledge management practices and applications
- Knowledge verification and validation (e.g. Blockchain)
- Knowledge protection and attack detection
- Smart Knowledge and Resource Optimization
- Knowledge dissemination
- Knowledge management systems
- Knowledge and data integration
- Knowledge adaptation
- Knowledge creation and acquisition

### **Knowledge Graphs**

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

