

Call for Papers

Special Issue on “Knowledge Graph Applications in Intelligent Decision”

Almost all decisions have complex backgrounds and collaborative requirements. Big data and artificial intelligence development allow machines to assist us in making decisions, enabling us to deal with problems more quickly, efficiently, and flexibly. However, the increasingly complex and unpredictable social environment bring more problems for intelligent decision, which dramatically increases the difficulty of decision-making. In a complex decision-making environment, technologies like Complex Network Analysis, Knowledge Graph have been put forward and applied to decision support systems. Knowledge Graph technologies, represented by knowledge acquisition, knowledge representation, and knowledge enhancement, have become an indispensable part of AI to make machines possess a higher level of human intelligence. The Knowledge Graph allows the intangible knowledge to transfer into structural data through the triples with entities and relations. Knowledge Graph has been used in wisdom medical, decision support, product and project scheduler, etc.

This special issue aims to explore the application and construction of the knowledge graph for intelligent decision and publish high-quality papers that make significant contributions to applying the knowledge graph in intelligent decision. All researches related to knowledge graph and decision support are welcomed, including (but not limited to) knowledge graph construction, knowledge-based decision making, and decision support. Topics may include, but are not limited to:

- System-of-systems modeling for intelligent decision
- Optimization of system-of-systems based on knowledge graph
- Knowledge based complex decision support systems
- Knowledge graph applications for complex systems
- Complex social network analysis for intelligent decision
- Knowledge graph representation and acquisition for complex decision support systems
- Foundations, algorithms, models, and theory of decision-related knowledge graph processing
- Rule and links discovery in knowledge graph computing

Submission Guidelines: Submitted articles must not have been previously published or currently submitted for publication elsewhere. Submissions the journal guidelines will be summarily rejected. The journals must be submitted online at <https://mc.manuscriptcentral.com/ieee-sj>. The author guidelines can be found at <https://ieeesystemsjournal.org/authorinstructions/>. Select the paper type "SI: Knowledge Graph Applications in Intelligent Decision" upon submission to ensure that the article is considered for this special issue. Authors must also mention the same in their submission cover letter.

Important Dates

Submission deadline: Oct 31, 2022

First round of review: Dec 01, 2022

Second round of review: Jan 30, 2023

Final decision: Mar 30, 2023

For further information, please contact any of the Guest Editors.

Guest Editors

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