Call For Papers

Special Session: Data-Driven Multi-Granularity Computing Methods and Cognitive Applications
Conference: The 2023 International Conference on Cyber-physical Social Intelligence (ICCSI)
Date: October 20-23, 2023   **Meeting mode:** In-person
Location: Xi'an, China   **Web site:** https://agist.org//iccsi2023

Granular computing is a newly emerged concept and computing paradigm in the field of artificial intelligence, mainly concentrating on the formation, processing, and communicating information granules. During the past decades, several specific theories have been deeply explored, such as fuzzy sets, rough sets, three-way decisions, formal concept analysis, quotient space, cloud models, etc. With the emergence of big data, the Internet of Things, and the industrial internet, various complicated data analysis tasks subsequently emerged in the development of social economy. Among the known problem-solving tools of data analysis issues, the framework of multi-granularity computing are conducive to addressing various complicated data analysis tasks from multiple views and levels, which enables scholars and practitioners to comprehensively analyze complicated data-driven problems. In recent years, many popular multi-granularity computing methods and cognitive applications have been explored, such as multigranulation rough sets, multi-scale decision systems, covering-based rough set, double-quantitative rough sets, etc. In this session, we would like to collect and investigate the recent advances in the ongoing researches of Data-Driven Multi-Granularity Computing Methods and Cognitive Applications. We also welcome high-quality papers in all theoretical and practical aspects of data-driven multi-granularity computing.

Interested topics include (but not limited to):
- Uncertainty in multi-granularity computing and complex data processing
- Fuzzy set and logic with multi-granularity cognitive applications
- Data-driven multi-granularity information analysis in engineering
- Theory and methods of multigranulation rough sets
- Three-way decision models for multi-source information processing
- Intelligent data analysis with formal concept analysis
- Decision-making approaches using multi-granularity computing
- Intelligent engineering applications using multi-granularity computing
- Natural language processing methods using multi-granularity computing
- Other emerging cognitive applications with multi-granularity data structures

Important Dates:

March 31, 2023,	Letter of intent for paper contribution
May 15, 2023,	Full paper submission
July 1, 2023,	Acceptance/Rejection notification
August 31, 2023,	Final camera-ready papers due

Special Session Co-chairs:
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All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above