Call for Papers

Special Session on Soft Clustering: Applications and Approaches

Soft clustering, also known as fuzzy clustering, is a method used in data analysis where each data point can belong to multiple clusters to varying degrees. Unlike hard clustering, where each data point is assigned to a single cluster, soft clustering assigns a membership value to each data point for every cluster, indicating the strength of association. This approach is particularly useful when data points exhibit characteristics of multiple clusters or when cluster boundaries are not well-defined. This session invites original contributions in the following (but not limited to) areas:

- Theoretical foundations and algorithms for soft clustering
- Fuzzy, three-way and their extensions based soft clustering approaches
- Comparative studies of soft and hard clustering techniques
- Scalability and efficiency of soft clustering algorithms
- Hybrid clustering methods
- Soft clustering in big data analytics
- Applications of soft clustering in:
    - Bioinformatics and computational biology
    - Image and video processing
    - Text and web mining
    - Social network analysis
    - Market segmentation
    - Sensor networks and IoT
- Evaluation metrics and validation techniques for soft clustering
- Software tools and frameworks for implementing soft clustering
- Case studies and real-world applications

Review Process

Papers submitted to special sessions will be handled as regular papers in terms of the review process and proceedings (e.g., length, timeline). However, the session organizers will be required to nominate reviewers.

Important Dates

- **Paper Submission Deadline:** January 5, 2025
- **Notification of Acceptance:** March 20, 2025
- **Camera-Ready Papers Due:** April 6, 2025
- **Conference Dates:** May 11 – 13, 2025

Special Session Organizers

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For any inquiries regarding the special session, please contact the organizers.

We look forward to your contributions and to seeing you at IJCRS 2025.