



ICIDA 2024

**International Conference on Innovations in Data Analytics
(ICIDA 2024)**

Organized by

Eminent College of Management and Technology (ECMT)

Technically Sponsored by:

Scientific Innovation Research Group (SIRG), Egypt

Scientific Research Group in Egypt (SRGE), Egypt

CI2S lab, Argentina

Date: 18th – 19th December, 2024 (Hybrid Mode)

******* CALL FOR PAPERS *******

SPECIAL SESSION

**Advanced Fuzzy Logic and Computational Techniques in
Mathematical Modeling**

SESSION ORGANIZERS:



Rahul Kar

State Aided Teacher
Department of Mathematics
Kalyani Mahavidyalaya,
Kalyani, West Bengal, India



Dr. Biswadip Basu Mallik

Associate Professor of
Mathematics
Department of Basic Science &
Humanities
Institute of Engineering &
Management (School of
University of Engineering and
Management), Kolkata, India.



Dr. Gunjan Mukherjee

Associate Professor
Department of Computational
Sciences
Brainware University,
Kolkata, West Bengal, India.

SESSION DESCRIPTION:

This special session on "Advanced Fuzzy Logic and Computational Techniques in Mathematical Modeling" explores cutting-edge methodologies and their applications in solving complex mathematical problems. Participants will delve into the integration of fuzzy logic with computational methods, enhancing the precision and efficiency of models. Topics include novel algorithms, real-world applications, and interdisciplinary approaches. This session aims to foster collaboration among researchers and practitioners, driving innovation in mathematical modeling. Join us to gain insights into the latest advancements and contribute to the future of fuzzy logic in computational mathematics.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Incorporating Fuzzy Logic in Nonlinear Mathematical Models
- Fuzzy Differential Equations and Their Computational Solutions
- Hybrid Computational Techniques for Fuzzy Systems
- Fuzzy Logic Applications in Optimization Problems
- Advanced Algorithms for Fuzzy Mathematical Modelling
- Fuzzy Logic for Real-Time Data Processing in Mathematical Models
- Stochastic Fuzzy Systems and Their Computational Approaches
- Fuzzy Regression Analysis in Computational Modeling
- Computational Techniques for Fuzzy Time Series Analysis
- Fuzzy Logic in Computational Fluid Dynamics Models
- Handling Uncertainty in Mathematical Models Using Fuzzy Logic
- Fuzzy Clustering Algorithms in Computational Models
- Fuzzy Logic-Based Control Systems in Engineering Models
- Integrating Fuzzy Logic with Machine Learning in Mathematical Modeling
- Applications of Fuzzy Logic in Environmental Modeling
- Computational Fuzzy Logic for Financial and Economic Modeling
- Developing Robust Fuzzy Logic Algorithms for Predictive Modeling
- Fuzzy Logic in Computational Neuroscience Models
- Fuzzy Logic Approaches in Network and Graph Theory Models
- Challenges and Future Directions in Computational Fuzzy Mathematical Modeling

PUBLICATION AND SUBMISSION PROCEDURE

The conference aims at carrying out double-blind review process. The papers submitted by the authors will be assessed based on their technical suitability, the scope of work, plagiarism, novelty, clarity, completeness, relevance, significance, and research contribution. The conference proceedings will be published in **Springer LNNS Series (Scopus)**.

Website: <http://icida.ikrf.in>

Submission Link: <https://cmt3.research.microsoft.com/ICIDA2024>

Submission Deadline: **30th September, 2024**

NOTE: While submitting the paper in this special session, please specify [Advanced Fuzzy Logic and Computational Techniques in Mathematical Modeling] at the top (above paper title) of the first page of your paper.

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