Special Session: Intelligent Computing in Multidisciplinary Engineering Applications

Session Chair: Dr. Aarti Chugh
E-mail: aarti.sneha@gmail.com
Mobile: 8448706170

Session Co-Chair: Dr. Nisha Charaya
Email:ncharaya@ggn.amity.edu nn
Mobile: 8800777367

Session Co- Chair: Dr. Charu Jain
E-mail: charu.jain@xebia.com
Mobile: 9891308590

Motivation and objective of the special session

Computational intelligence serves as a powerful tool to mimic and process human knowledge. This has yielded a spectrum of intelligent computing approaches to optimize multidisciplinary engineering applications. Although 'Intelligent Computing' is a developed area of research, many new findings are being evolved by researchers in multitude of applications. It is known that hybridization of computational approaches with traditional engineering methodologies and applications has become a topic of increasing interest for both researchers and developers globally from academia as well as industries. This special session is devoted to promote the investigation of the latest research of mathematical models and foundations and their effective applications, to explore the latest innovations in theories, models, ideas, technologies, applications and tools of Computer science, Artificial Intelligence, soft computing, machine learning and Big Data to assess the impact of the approach, and to facilitate numerous interdisciplinary domains of engineering and bio-medical.

1. **Evolutionary Computation**
2. **Swarm Intelligence**
3. **Artificial Neural Networks**
4. **DNA and Molecular Computing Biological Computing (Bio-inspired computing)**
5. **Artificial Immune Systems**
6. **Autonomy-Oriented Computing**
7. **Agent based Systems Computational Neuroscience**
8. **Fuzzy Systems**
9. **Genetic Algorithms**

10. **Hybrid Systems**
11. **Multi-/Many-Objective**
12. **Optimization Deep learning**
13. **Gen AI**
14. **Computational Neuroscience**
15. **Pattern Recognition and Machine Learning**
16. **Signal, Image and Video Processing Speech Processing**
17. **Data Fusion**
18. **Knowledge Discovery, Data Mining and Expert Systems**
19. **Information Security**
20. **Bio-informatics**
21. **Robotic vision systems**
22. **Biometrics, Security and Forensics Applications.**