1. Brief Profile and Photo of Chairperson

Biographical Sketch:



Dr. Seema Purohit, supurohit@gmail.com, 9821317128

Dr. Seema Purohit has a Doctorate Degree in Applied Mathematics from University of Mumbai. She has a unique combination of a Technological Expertise and Operational Excellence by which understanding the needs of today's Education System, IT Industries and Business Organizations becomes easy. She is a senior member of Internal Association of Computer Science and IT (IACSIT), Singapore, IEEE, Computer Society of India (CSI), Association of Women in Engineering (WIE) & ACM, Indian Science Congress Association.

She has attended and presented several papers and worked as reviewer, Advisory & Technical programme committee member, General Chairs, Session Chair for National & International symposiums, conferences and has to her credit several research papers on the topics related to mathematics, Information Technology, Management, Computational Sciences published in the peer reviewed and reputed referred international journals. She is a recognized post graduate teacher and guide for post graduate and doctoral research programmes in the subject of Computational Mathematics, Computer Science and Information Technology for reputed universities. She has guided successfully 30 M.Phil. students. At present 11 Ph.D. students are pursuing their research in the subject of Computer Science and Mathematics.

Her areas of expertise include applications of Computational Mathematics and Statistics to other fields including Computer Science, Technology, ICT and Management. She has experience of more than 15 years in IT and IT allied educational initiatives. She has taken and supervised over 150 projects at post graduate programmes including Post Graduate Programmes in Computer Science, IT, Computer Applications, Management Studies, Systems.

2. Aim and Scope of Session

Computational Research and Innovations lies on top of the pyramid having its base in Computational thinking, Computational Intelligence and Intelligence. Intelligence is the ability to acquire and apply knowledge and skills. Important aspects of it are: Abstract thinking, Logic building and Problem Solving. The opportunities in multidisciplinary research areas and research projects strongly suggested the emergence of Computational Thinking. Computational thinking when applied to these multidisciplinary areas such as biology, chemistry, computer science, modeling and simulation, linguistics give rise to Computational Intelligence, which eventually give birth to creativity. Hence the aim of this special session is to bring innovative ideas in computational thinking and computational intelligence under one umbrella. The scope of the session is spread across all the computational techniques including Soft Computing Techniques, data mining techniques, use of algorithms and improvisations in them, Mathematical Modeling and simulation Techniques, Linguistics Techniques...etc.

Suggested Areas of Coverage (Sub – themes: Problem solving through) but not limited to Applicability of mathematics to multidisciplinary areas Artificial and Machine Intelligence, Robotics, Cryptography

Mining of data and Big / Massive Data Analytics

Next Generation Networks and Cloud Computing

Recent trends in Software Engineering

Use of Rough Sets, Computational solutions and Mathematical Modeling for core as well as multidisciplinary areas

Computational Linguistics and Natural Language Processing (NLP)

Expert and Intelligent Systems

Computational Biology/ Bioinformatics

3. Details:

Session Title: Computational thinking for Multidisciplinary Research Areas in Science, Technology and Management

Chairperson: Dr. Seema Purohit, Research Guide, University of Mumbai, Professor, Department of Mathematics, Kirti M. Doongursee College, University of Mumbai