

**Special Session
on**
(“Recent Developments in Nature Inspired Algorithms”)
**International Conference on Computational Intelligence and Data Science
(ICCIDS 2018)**
<http://iccids2018.ncuindia.edu/>

7-8th April, 2018
at

The NorthCap University, Gurugram

AIM: The aim of this special session is to serve as a forum for facilitating and enhancing information sharing among researchers, with themes including the development of advanced nature-inspired algorithms

SCOPE:

In recent decades, most of research work is focused on the formulation of the natural phenomena's, laws, behaviour of species etc. into effective algorithms. Further, many researchers have recommended that the laws of nature are good source of inspiration for solving the various optimization problems and also to develop effective intelligent systems. These algorithms are known as Nature-inspired algorithms, which are inspired by natural phenomena (i.e. genetic algorithms (GAs) and differential evolution algorithms (DEs) were inspired by biological evolutionary processes; particle swarm optimisation algorithms (PSOs), artificial bee colony algorithms (ABCs) and ant colony optimisation algorithms(ACOs) were inspired by animal behaviours, big bang big crunch algorithms (BBBC) were inspired by big bang theory, charge system search algorithms (CSS) were inspired by charged particle theory, gravity algorithm inspire through gravity theory) have been widely applied in various fields. Because of their proven efficiency and merits in discovering effective and better solutions for optimization problems, nature-inspired algorithms have attracted more and more attention from researchers and engineers in various fields of engineering.

Topics of Interest: The topics of interest include but are not limited to:

- ❖ Development of new nature-inspired algorithms, including architectural and operator design, and performance tests
- ❖ Theoretical studies and analysis on nature-inspired algorithms, including convincing computational experiments, performance tests and convergence
- ❖ Innovative and nontrivial applications of nature-inspired algorithms for solving optimization and engineering problems
- ❖ Other research topics relating to nature-inspired algorithms and their engineering applications
Evolutionary algorithms
- ❖ Hybridization of nature-inspired optimization algorithms
- ❖ Review and comparative studies of nature-inspired optimization algorithms
- ❖ New methodologies inspired from learning behavior of social insects/ evolution processes
- ❖ Theory and practice of nature-inspired algorithms in different domains
- ❖ Real-world problem solving using nature-inspired algorithms

Important Dates:

Extended date for submission: 30th January 2018
~~Last date for paper submission: 30th December 2017~~
Notification of Acceptance: 28th February 2018
Last date for camera ready paper: 10th March 2018
Author Registration Deadline: 15th March 2018
Conference date: 7-8 April 2018

All accepted papers will be published in Procedia Computer Science, Elsevier.

Notes for Prospective Authors:

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. All papers are refereed through a peer review process. If you have any queries concerning this special session, please email the Dr. Yugal Kumar at yugalkumar.14@gmail.com and yugal.kumar@juit.ac.in

Write Brief Biography of session Chair with photograph

Dr. Yugal Kumar is currently working as Assistant Professor (Senior Grade) in Department of Computer Science and Engineering, Jaypee University of Information Technology, Wakanghat, Solan, Himachal Pradesh, India. He received his B. Tech and M. Tech degree from MDU in 2006 and 2009 respectively. He received his Ph.D. degree from Birla Institute of Technology. His primary area of research includes meta heuristic algorithms, swarm intelligence, pattern recognition, medical data mining and machine learning.