Objectives:
Nature inspired computing is an evolutionary idea learnt by human from natural world (insect or animals) to solve real world complex problems. Over the past few years nature inspired algorithms have been used for mobile networks, finance and medical imaging applications. Evolutionary computing, most common terminology for nature inspired computing includes swarm intelligence (ant colony, particle swarm, etc.), artificial immune systems. This workshop/tutorial will introduce participants to the theoretical concepts of evolutionary computing and swarm intelligence algorithms and their applications to various problems in Science, Engineering and Finance areas.

Topics to be covered:

1. Introduction
   a. What is nature inspired computing?

2. Swarm Intelligence? Fundamental concepts in
   a. Ant Colony Optimization
   b. Particle Swarm Optimization
   c. Memetic Computing or Hybrid Algorithms

3. Applications
   a. ACO: Combinatorial Optimization Problems, Mobile Networks, Finance
   b. PSO: Mobile Networks, Finance, Task Scheduling on Cloud

This Program is useful for all research scholars who are likely to use algorithms in their work.
About the College

K.L.N. COLLEGE OF ENGINEERING is the first self-financing co-educational Engineering College in Madurai, started in 1994 by munificence of philanthropists and well wishers in Sourashtra community which is a linguistic minority in Tamil Nadu. This college is sponsored by the committee of eminent industrialists and academicians led by enthusiastic, educationalist and industrialist, Shri. K.L.N. Krishnan.

This college is sponsored by K.L.N. Sourashtra College of Engineering Council with Registered office at 69, South Veli St., Madurai and is approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Anna University. This is an ISO 9001:2008 certified institution. National Board of Accreditation (NBA), AICTE, New Delhi has accredited the departments of Mechanical Engg., Electrical & Electronics Engg., Electronics & Communication Engg., Computer Science Engg., Information Technology and Master of Computer Applications.

The college campus is situated in a quiet environment about 11 km from Madurai Railway station and about 7 km from Madurai Airport. There are 3000 students in the campus with 7 UG and 3 PG Engineering programs, in addition to MBA and MCA.

Mission

To promote into a premier learning center of academic excellence in Engineering, Technology and Management, Emphasizing research, Social concern and character development.

Vision

To attain autonomous status and strive for continual improvement in quality management system.

About the Department

Information Technology offers a four year B.Tech. Degree course in the state of the art technology started in 1999. The department is accredited by NBA and has an intake of 90, approved by AICTE and affiliated to Anna University of Technology, Madurai.

The department has five laboratories viz., Case Tool Lab, FOSS Lab, Microprocessor & Microcontroller Lab, Project Lab and Wifi Lab with MNC standard PCs (IMB & HP) with Pentium 4 processors under LAN environment. The network is provided with high speed switches with multiple segment sand 100 Mbps Fast Ethernet. Separate servers are allocated for OS like Windows and Ubuntu which enables the students to have a wider exposure in the networking concepts.

The department has established a student chapter of Computer Society of India (CSI) with a membership of 240 students. The KLNCE CSI student chapter regularly organizes FOSS workshop for students and AICTE sponsored SDP on “Storage Technology” organized for faculty recently. EMC² has conducted international certification test by PROVUE for students in information storage and management.

The department has arranged KLNCE to have MOU with leading IT firms like EMC Technology Ltd., Bangalore and BSNL, Chennai. The faculty conduct regular campus connect programs for Infosys Technologies Ltd., IBM's DB2, WSAD and EMC storage technology for students.

Registration

All Engineering College staffs’ are eligible to attend this program. A limited number of participant(first come first serve basis) are allowed to attend. Accommodation for outstation participants can be provided on prior request.

Registration Fee:

<table>
<thead>
<tr>
<th>Staff</th>
<th>Rs.500/-</th>
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<tbody>
<tr>
<td>P.G Students</td>
<td>Rs.400/-</td>
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DD should be drawn in favour of “The Principal, K.L.N. College of Engineering”

Important Dates:

- Last date for the receipt of registration form along with DD: 03rd July 2011
- Notification of selected participants through e-mail: 04th July 2011

Resource Persons:

1. Dr. Ruppa K. Thulasiram, Associate Professor, University of Manitoba Winnipeg, Manitoba Canada R3T 2N2

2. Dr. Parimala Thulasiraman, Associate Professor, University of Manitoba Winnipeg, Manitoba Canada R3T 2N2

Address for Communication

Convenor
Prof. R.T. Sakthisaran
Dean(Academic) & HOD/IT
Mobile: 91-9994164964
E-mail: sakthidaran@gmail.com

Note: Before sending DD, Reserve your registration through email or phone.

E-mail: satheesh.becse@gmail.com
Mobile: 91-9944171030