

**Centre for Development of Advanced Computing (C-DAC)** is a premier R&D organization under the aegis of Department of Electronics and Information Technology (DeitY), pioneering Supercomputer design, development and deployment in India.

C-DAC has delivered the renowned indigenous PARAM series of supercomputers in 1980s, GARUDA - Indian National Grid Computing Initiative in 2000s and presently implementing the National Supercomputing Mission.

It aims to build capacity and capability in supercomputing for the Nation to achieve economic and human advancement.

### Think Parallel

The demand to create 'parallel programming aware' human resource is well understood. The sea change in IT caused by the advent of multi- and many-cores makes parallel programming a challenge and life line for hardware, software, algorithms and programming.

Think Parallel is designed as a comprehensive workshop providing the right blend of fundamental and advanced concepts and practical hands-on experience of the state-of-the-art parallel computing technologies. C-DAC Knowledge Park, Bangalore conducts this training by leveraging the expertise of its in-house technical project staff.

This program will add great value to researchers, engineers, faculty and students who would like to develop applications on modern parallel architectures. It provides detailed know-how of programming the latest hybrid systems, to write more immersive parallel applications that achieve improved performance.

### Course Detail

- ♦ Advanced Computer Architectures
- ♦ Parallel Programming : Design & Paradigms
- ♦ Building Compute Clusters
- ♦ OpenMP
- ♦ Message Passing Interface (MPI)
- ♦ Accelerator Programming Overview
- ♦ Performance Analysis & Debugging Parallel Programs
- ♦ Parallel Application Case Studies
- ♦ Emerging trends in parallel computing

### Hosted at:

International Institute of Information Technology (IIIT),  
Gachibowli,  
Hyderabad-500 032,  
Telangana, INDIA,  
Phones:+91-40-6653 1000



### Course Schedule

16<sup>th</sup> - 18<sup>th</sup> December, 2016 (full time)

### Course Fee

Participants	Fee
Industry/Govt. Organizations	₹ 8000
Faculty/Academicians	₹ 5000
Full-time Student	₹ 2000

Fees includes luncheon and refreshments

### Accommodation

Shared accommodation is available in the hostel on payment basis

### Registration Procedure

#### Online registration link:

<https://goo.gl/forms/5bHlIkyxFo3gAUcc62>

### Course Methodology and Highlights

- ♦ Full-time program (8 hrs per day for 3 days)
- ♦ Classroom & laboratory sessions by R&D experts
- ♦ Extensive demonstrations and assignments
- ♦ Relevant case studies and Group Discussions
- ♦ Presentation with course proceedings
- ♦ Introduction to forthcoming technologies Industry interactions/visits

### Prerequisite:

*C/C++ programming with data structures, familiarity with Linux/Unix programming environment*

- ❖ Seating is limited, hence early registration is strongly encouraged

For any queries/assistance contact: Ms. Jalajakshi: +91-80-66116400/1/2 or think-parallel@cdac.in

For Accommodation contact: Mr. Manohar, IIIT-H, manohar.chp@iiit.ac.in

### Co-ordinators

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