# **AUDIENCE**

Faculty members and Research Scholars (Pursuing PhD) of all Engineering/Sciences Backgrounds

**Registration Fee**NIL

**Number of Participants Expected** 

30

Course Duration:
One Week (07<sup>th</sup>-11<sup>th</sup> August, 2023)

**Course Mode:** Offline

Veune: DTU

Registrations will be accepted on first come basis.

# The topics intended to be covered

**Linux Fundamentals for HPC** 

**HPC Fundamentals** 

Open-Source tools for High Performance Computing

High-Performance Computing for Big data and Quantum computing

**Deep Learning & its Applications** 

The resource persons will be from CDAC (Pune), IBMRL, SAMSUNG and DTU

For further queries you may contact Dr. Sanjay Kumar: 9899846345
Mr. Kavinder singh: 9045852502
Mr. Rohan Pillai: 9399279175
Email: sttp.hpcai@gmail.com



#### **CHIEF PATRON**

**Prof. Jai Prakash Saini** *Hon'ble Vice Chancellor, DTU* 

## **PATRON**

Prof. Madhusudan Registrar, DTU





#### **CHAIRMAN**

**Prof. Vinod Kumar** *Head, CSE, DTU* 

### **CONVENER**

**Prof. Rahul Katarya** *CSE*, *DTU* 





## **CO-CONVENER**

**Dr. Virender Ranga** Assoc. Prof., IT, DTU

## **CO-CONVENER**

Mr. Ashish Kulvelkar Senior Director, CDAC Pune



#### **CO-CONVENER**

Mr. Naveen Kumar Scientist E, Ministry of Electronics and IT (MeitY), Govt. of India.

#### **COORDINATOR**

Dr. Sanjay Kumar
Asst. Prof., CSE, DTU
Mr. Kavinder Singh
Asst. Prof., CSE, DTU

#### CO-COORDINATOR

Ms. Trasha Gupta
Asst. Prof., Mathematics
& Computing, DTU

Mr. Rohan Pillai Asst. Prof., EE, DTU

## Mr. Piyush Vaish

Knowledge Network Manager, Computer Center, DTU















Dept. of Computer Science & Engg. Delhi Technological University, Delhi

in Association with CDAC Pune

is organizing a

One Week Short Term Training Program

on

Introduction to High
Performance Computing
(HPC) and its Application in
Artificial Intelligence (AI)

7<sup>th</sup> - 11<sup>th</sup> August, 2023

# **ABOUT THE UNIVERSITY**

Delhi Technological University (DTU) is a nonaffiliating, teaching and research University at Delhi to achieve excellence in science, engineering, technology, management and allied areas and matters connected there with or incidental thereto. The University enables students to face the wide-ranging changes taking place in the fields of science, technology, environment and management. This includes innovation, design, development, construction, production, managerial and entrepreneurial activities. The University lays great emphasis on assisting students in the development of national character, self-confidence, leadership and fostering an ecosystem for creativity and imagination. This university was initially established with the name of Delhi Polytechnic in the year 1941 and was renamed to Delhi College of Engineering in 1965. In 2009, Delhi Technological University was reconstituted from Delhi College of Engineering by the Government of NCT of Delhi. The University has an illustrious history spanning over 78 years.

# **ABOUT CDAC**

Centre for Development of Advanced Computing (C-DAC) is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out R&D in IT, Electronics and associated areas. Different areas of C-DAC, had originated at different times, many of which came out as a result of identification of opportunities.

The setting up of C-DAC in 1988 itself was to built Supercomputers in context of denial of import of Supercomputers by USA. Since then C-DAC has been undertaking building of multiple generations of Supercomputer starting from PARAM with 1 GF in 1988.

Almost at the same time, C-DAC started building Indian Language Computing Solutions with setting up of GIST group (Graphics and Intelligence based Script Technology); National Centre for Software Technology (NCST) set up in 1985 had also initiated work in Indian Language Computing around the same period.

Electronic Research and Development Centre of India (ER&DCI) with various constituents starting as adjunct entities of various State Electronic Corporations, had been brought under the hold of Department of Electronics and Telecommunications (now MeitY) in around 1988. They were focusing on various aspects of applied electronics, technology and applications.

With the passage of time as a result of creative ecosystem that got set up in C-DAC, more areas such as Health Informatics, etc., got created; while right from the beginning the focus of NCST was on Software Technologies; similarly C-DAC started its education & training activities in 1994 as a spin-off with the passage of time, it grew to a large efforts to meet the growing needs of Indian Industry for finishing schools.

C-DAC has today emerged as a premier R&D organization in IT&E (Information Technologies and Electronics) in the country working on strengthening national technological capabilities in the context of global developments in the field and responding to change in the market need in selected foundation areas. In that process, C-DAC represents a unique facet working in close junction with MeitY to realize nation's policy and pragmatic interventions and initiatives in Information Technology. As an institution for high-end Research and Development (R&D), C-DAC has been at the forefront of the Information Technology (IT) revolution, constantly building capacities in emerging/enabling technologies and innovating and leveraging its expertise, caliber, skill sets to develop and deploy IT products and solutions for different sectors of the economy, as per the mandate of its parent, the Ministry of Electronics and Information Technology, Ministry of Communications and Information Technology, Government of India and other stakeholders including funding agencies, collaborators, users and the market-place.

For Registration, Click on the Link - <a href="https://forms.gle/vnGhQhL3pmDCangKA">https://forms.gle/vnGhQhL3pmDCangKA</a> and the last date of registration is 3<sup>rd</sup> August, 2023

# ABOUT CSE DEPARTMENT

The Department of Computer Science and Engineering endeavors to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. Currently, the department offers Doctorate, post-graduate & under-graduate courses in the fields of Computer Engineering, Artificial Intelligence. The department also has an active student chapter of the Computer Society of India (CSI) and Society of Software Engineering which contribute significantly to professional activities undertaken by IEEE and IET student's chapters. The B. Tech (CSE) program has an NBA accreditation. Department has developed state-ofthe-art laboratories in the various fields of Computer Engineering- Computation and Programming Lab, Artificial Intelligence Lab, Linux Android Network Systems Lab, Samsung Digital Research Academy Lab etc.

# AIM OF THE EVENT

CDAC, Pune is implementing the National Supercomputing Mission (NSM), Govt. of India, steered jointly by the Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY). NSM aims to make India one of the world leaders in Supercomputing and to enhance India's capability in solving grand challenge problems of national and global relevance.

In view of the above-mentioned mission, we are organizing a one-week short-term training Program on "Introduction to HPC and its Application in Artificial Intelligence" (STTP HPC-AI) from 7<sup>th</sup> August to 11<sup>th</sup> August 2023. The aim of this short-term Program is to develop a highly professional HPC-aware human resource pool at all levels for meeting the challenges of the development of HPC applications as well as for managing, monitoring, and running such complex HPC systems.