

## **Facilities:**

# Library

The Library has well rounded collection of books and periodicals/ journals. These include text books, foundation books and books for subsidiary readings. Institute has access to digital library resources also.

## Labs

There are many labs under different divisions for example: Bio-Medical, Telemedicine, Cyber Security, Advance Network Engineering Lab, FOSS Lab, Multilingual Lab, Multi-Media & Web design, IT For Masses Lab, Workshops etc. These Labs are equipped with PC's, Servers (i3 / i5 / i7 Latest Configuration), IT hardware, Software and each system is connected with LAN. Class rooms are equipped with LCD projector.

#### **Auditorium & Conference Room**

The Centre has an AC Auditorium with capacity to accommodate 100+ persons. The auditorium is fitted with audio-visual equipment. The conference room has a capacity to accommodate 30 persons.

#### **About C-DAC**

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. C-DAC has emerged as a premier R&D organization in the country working on strengthening national technological capabilities and responding to change in the market need in selected foundation areas.

C-DAC, Mohali operates from its own impressive building having a covered area of approximately 4300 sq. mts. The centre is engaged in design and deployment of world class IT and electronics solutions in the following domains:

- Health Informatics
- Multilingual Technologies
- · Artificial Intelligence
- Software Technologies
- Cyber Forensics and Security

C-DAC Mohali is also conducting M.Tech program in Artificial Intelligence, Cyber Security and Embedded Systems. It also offers courses for foreign participants, sponsored by MEA under ITEC/SCAAP programs.

## **About Applied AI & Analytics Group**

The Applied Artificial Intelligence & Analytics Group at C-DAC Mohali comprises a team of highly skilled and experienced professionals dedicated to advancing AI and analytics research and development. The AAIA lab is equipped with stateinfrastructure. including of-the-art highperformance GPU servers and workstations, enabling cutting-edge research and large-scale Al computations. The lab has developed a range of innovative solutions in areas such as machine deep learning, natural language learning, processing, computer vision, and data analytics. These solutions are tailored to meet the specific needs of industry, government, and academia, contributing to the broader adoption and impact of Al technologies in various sectors.



Mohali, Punjab

#### **Course Brief**

This advanced training program provides an indepth exploration of responsible AI, emphasizing ethical, privacy, and fairness considerations. Participants will engage with the latest frameworks, tools, and best practices for creating AI systems that are transparent, accountable, and aligned with societal values.

# **Course Objective**

The objective is to equip participants with the knowledge and skills to develop and implement AI solutions that are ethical, fair, and compliant with regulatory standards. The course aims to foster a deep understanding of responsible AI principles and practical approaches to addressing challenges in AI deployment.

# **Target Group**

The programme has been specially designed for Scientists/ Technologists (Group-A only) working in Departments/ Ministries of Central Govt Public Sector Units, Govt. Research Laboratories and Scientists/ Technologists working in State Governments The Scientists and Academicians(only Ph.D./ M.Tech Degree holders) from Central and State Universities, Educational Institutions & Colleges, engaged in R&D in any discipline of Science & Technology are also eligible.

- Group 'A' officer serving in Govt. organization.
- The upper age limit is 58 years on July 1, 2024.
- Number of years of service as Group 'A' scientist - 05 years and above.
- The nominations shall be accepted as per DST guidelines.
- Only 2 nominations shall only be accepted from one government department

## **Training Session Plan**

## Day 1

**Fundamentals of Artificial Intelligence:** Overview of AI principles, the significance of data in AI, frameworks for building AI systems, and current trends and emerging technologies in AI.

### Day 2

Foundation of Machine Learning Techniques: Basics of machine learning techniques, potential applications of machine learning, deep learning architectures, and principles of ethical Alfairness, transparency, accountability.

## Day 3

Understanding Bias in Al Systems: Identifying and understanding bias in Al, techniques for bias detection and mitigation, comprehensive methods for fairness evaluation, and human-centered approaches to fair Al, supplemented by an industrial visit.

### Day 4

Addressing Challenges in Al Interpretability: Challenges in Al interpretability, techniques and tools for model interpretability, case studies and applications of explainable Al, and practical approaches to enhancing model interpretability.

## Day 5

Ethical AI: Case Studies and Best Practices: Case studies and best practices in ethical AI, and the regulatory landscape and compliance in AI.

#### **Batch Size**

The programme has a limited intake capacity of 25 participants, and their admission will be based on the criteria outlined in the Training Guidelines set by the Department of Science and Technology (DST), Government of India.

#### **Fees**

The programme is sponsored by the Department of Science and Technology (Government of India), and participants will not receive any Travel Allowance (TA) or Daily Allowance (DA). However, all expenses related to the training program, including Fees, Food, Accommodation, and Local Transportation, will be covered by the DST, Gol, except for the costs of the participants' travel from their place of duty to C-DAC, which will be borne by the sponsoring organizations.

# How to apply

Applicants can send their nominations online by applying at <a href="https://training.dst.gov.in">https://training.dst.gov.in</a>. For any further details, contact: Ph. No- 0172-6619000, 2237052-55 Email ID: mail to:ajay@cdac.in , dst-trg@cdac.in For Course Related Queries contact: soniad@cdac.in, msanjay@cdac.in

Sh. VK Sharma (Scientist-G & Centre Head)

# **Organizing Committee:**

Sh. Ajay Mudgil (Scientist-E & Nodal Officer)
Dr. Manjit Kaur (Scientist-E & Program Coordinator)
Smt. Amritpal Kaur (Senior Technical Officer)

#### **Technical Committee:**

Smt. Sonia Dosanjh (Scientist-F & HoD - AAIA)
Dr. Sanjay Madan (Scientist-E & Training Coordinator)
Sh. Chetan Manchanda (Principal Technical Officer-I)
Sh Ankit Khurana(Scientist-D)
Smt. Gulbadan Khehra (Project Engineer)