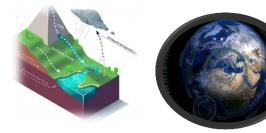
#### Topics to be covered:

- Introduction of AI, Machine Learning and Earth Science.
- Data Pre-processing and Data Analysis Techniques.
- Recent Tools and Techniques for Data processing.
- Earth Science Data Acquisition
- Remote Sensing and GIS based data processing.
- subsurface features identification and its interpretation.
- Al, Machine Learning and Deep Learning Techniques in Earth Science.
- Identification of minerals and rocks through Image Processing Tools and Techniques.
- Issues and Challenges in Earth Science.
- Natural Hazards and its Remedies
- Concepts of Hydro-geology and Ground Water Modelling
- Discussion on Various Case Studies based on application of AI, Machine Learning and Earth Science



## **Objectives of the Course**

The application of AI and Data Science in the Earth Science is the emerging research field. These techniques can aid for detection, prediction and identification of various earth features. The advancement in intelligent computing has led to the development of tools and techniques useful for earth science and geological applications. This FDP will be focused on progress in artificial intelligence and machine learning tools with their application in geo science. Novel technological advances in the field and associated ethical considerations will also be discussed.

The objectives of this FDP will be providing an interdisciplinary forum for researchers, staff and faculty as well as delegates from industry engaged in the full spectrum of research, development, application, and to discuss the current state of the art and developments of advanced techniques to solve the recent challenges and issues.

# Online Registration Link for this FDP:

https://atalacademy.a icte-india.org/login





## Two Week AICTE (ATAL) Sponsored

**Faculty Development Programme (FDP)** 

"Al and Data Science Based Emerging Trends in Earth Science"

07-18 November 2022



## **Organized by**

Department of Information Technology and Department of Computer Science and

Engineering
National Institute of Technology

National Institute of Technology Raipur- 492010 (Chhattisgarh)

#### About the AICTE:-

All India Council for Technical Education (AICTE) was set up as a national-level Apex Advisory Body to conduct a survey on the facilities available for technical education. The aim was to promote development in the country in a coordinated and integrated manner. Council do the same through school accreditation, funding in priority monitoring and evaluation, areas, maintaining parity of certification & awards, ensuring coordinated & integrated development and management of technical education in the country

#### **About the Institute:**

National Institute of Technology, Raipur situated in the capital of Chhattisgarh, has proven to be "avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14th September, 1956. the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi and all metro cities by regular flights and is on the main Howrah-Mumbai railway route.

#### **About Department:**

The Department of Computer Science and Engineering and Information Technology came into existence in year 2000. CSE and IT department is the study, research and work place of approximately 600 students from the 28 states across India. The departments outstanding provides an research environment and offers academic program leading to the award of B.Tech., M.Tech. and Ph.D. degree.

### **Speakers:**

Eminent Faculty Members from prestigious institutes and organizations will deliver the lectures and conduct practical sessions.

## **Address for Correspondence**

Dr. Naresh Nagwani

Department of Comp. Sc. and Engg

NIT Raipur (CG) - 492 010

Email: nknagwani.cs@nitrr.ac.in Contact No.: +91-9993312001

Dr. Mridu Sahu

**Department of Information Technology** 

NIT Raipur (CG)-492 010

Email: mrisahu.it@nitrr.ac.in



#### **Chief Patron**

Dr. A. M. Rawani, Director, NIT Raipur **Patron** 

Dr. Prabhat Diwan (R&C), NIT Raipur Chairperson

Dr. Rakesh Tripathi, HoD, Department of **Information Technology** Dr. Dilip Singh Sisodia, HoD, Department of **Computer Science and Engineering.** 

#### **Course Coordinators**

Dr. Naresh Nagwani (Coordinator) Associate Professor, NIT Raipur Dr. Mridu Sahu (Co-coordinator) Assistant Professor, NIT Raipur

## No Registration Fee

### **Important Dates:**

Last Date of Registration: 02th Nov, 2022

Intimation Date: 04th Nov. 2022 FDP Date: 07th - 18th Nov 2022

#### Venue:

National Institute of Technology, G.E. Road, Raipur-492010, (C.G.), India

