

# Management Development

Program Indian Institute of Management Raipur Atal Nagar, Raipur, Chhattisgarh

# Machine Learning & Data visualization for Senior Police Officers

27-29 JUNE 2024

## **Program Directors**

Prof. Manojit Chattopadhyay Prof. Sumeet Gupta

Indian Institute of Management Raipur

## **Program Overview:**

Welcome to the Machine Learning and Predictive Analytics Program, an immersive journey into the dynamic realms of artificial intelligence (AI), machine learning (ML), and predictive analytics. This program equips participants with essential knowledge and practical skills to navigate the rapidly evolving landscape of data science and decision-making.

Throughout the program, you'll delve into fundamental concepts in machine learning, exploring techniques such as classification modelling, regression modelling, clustering and text mining. We'll cover supervised and unsupervised learning, classification, social network analysis, text mining and regression, providing a comprehensive understanding of these methodologies.

Hands-on experiences are integral, allowing participants to train machine learning models, evaluate performance, and engage in related dataset applying predictive analytics and machine learning techniques.

Additionally, participants will immerse themselves in Tableau, one of the most popular data visualization tools in the analytics industry. By signing up for a Tableau Public account, participants will connect to data sources and explore various components of Tableau, enhancing their ability to communicate insights effectively.

Embark with us on a journey to unleash the potential of machine learning, predictive analytics, and Tableau to drive innovation and informed decision-making in today's data-driven world.

The program will cover the following topics in depth with relevant use cases:

- 1. Classification modeling
- 2. Regression modelling
- 3. Clustering
- 4. Text mining
- 5. Data visualization
- 6. Social network analysis

### **Objectives**

The key objectives of the program are as follows:

- Gain a deep understanding of the significance and excitement surrounding machine learning, predictive analytics, and data visualization in today's technological landscape.
- Describe and illustrate different artificial intelligence and machine learning problems and techniques, including supervised and unsupervised learning, clustering, and reinforcement learning.
- Identify and articulate the key characteristics of the social network analytics, along with its versatile text mining applications across various machine learning contexts.
- Explain the comprehensive process of training and utilizing a machine learning model, encompassing data collection, analysis, feature engineering, and model evaluation.
- Evaluate the importance of data features in machine learning, analyze their impact on the performance and functionality of machine learning systems, and develop the ability to discern effective and poor data visualizations based on Tufte's guidelines and Gestalt Principles.

### **For Whom**

- Middle level managers/Government official
- Business consultants/ Senior policy makers

## Pedagogy

The program will offer a highly interactive learning experience, incorporating multimedia presentations, engaging case studies, insightful lectures, and role play/ active participation in various formats.

## Faculty

All sessions in this program will be co-facilitated by the Program Directors along with the subject matter experts.

## **Duration and Venue**

The programme is scheduled during Jun 27-29, 2024 at IIM Raipur, Atal Nagar, New Raipur

## **Registration Fee**

As per Institute's norms the registration fee per participant will be Rs. 6500/- per day of the training program excluding Lodging and Boarding. This fee includes the program kit, study material, certificate and photography.

Accommodation including all meals is additional as follows:

Single accommodation - Rs. 4500/-+ GST per day per participants Twin sharing - Rs. 2500/- + GST per day per participants

#### Payment can be made online by registering through the website.

Upon remitting the fees online, kindly intimate the EL&D Office with the UTR No /Relevant transaction details through email, so that we can connect your remittance to your nomination(s)

#### Last date

The last date for receipt of nominations for the Programme is **Two week before the commencement of program** and the last date of withdrawal is **one week before the commencement of program**. Any withdrawal request received after this duration will be subject to deductions as per the Institute's rules. In case of subsequent withdrawal or cancellation of nomination(s), no refund of fee will be allowed. However substitutes may be permitted with prior intimation.

#### Enquiry

For any information regarding this programme, you may contact

mchattopadhyay@iimraipur.ac.in (+91 771 2474650)

#### **About Programme Directors**



#### **Prof. Sumeet Gupta**

Prof. Sumeet Gupta is affiliated as Professor (Information Systems) at IIM Raipur. He received PhD (Information systems) and MBA from the National University of Singapore and BE (Mining) from GEC Raipur. He has 18 years of work experience in Industry, Teaching and Research, during which he worked with L&T India, The Logistics Institute-Asia Pacific, Singapore and SSGI Bhilai before joining IIM Raipur. He participated in Global Colloquium at Harvard Business School in 2015. He has held visiting faculty assignments with IIIT Naya Raipur and Huazhong University of Science and Technology, Wuhan, China. He has been accredited by AIMA as an Accredited Management Teacher and was awarded Prof. Manubhai M Shah Memorial Award by Indian Commerce Association in 2017. He was also awarded President Graduate Fellowship at the National University of Singapore. He has published extensively in top-ranked International Journals



#### **Prof. Manojit Chattopadhyay**

Prof. Manojit Chattopadhyay is a Professor and affiliated to the Information Systems area. He received his PhD in Business Management from the University of Calcutta. He has around 20 years of work experience in Industry, Teaching and Research. His research focuses on application of AI based models in business decision making, strategic information visualization in the New digital economy, data privacy, Policy mining, Visual Clustering and social network analysis. He participated in Global Colloquium at Harvard Business School in 2017. He has published more than 60 papers in various reputed International journals and conferences.

## **Indian Institute of Management Raipur**

The Indian Institute of Management (IIM) brand has now become synonymous with innovation, talent, and zeal for success and contribution to management. The Government of India set up IIM Raipur in 2010 to meet the growing demand for top-quality professionals. It is situated at Raipur in the state of Chhattisgarh-one of the fastest growing states of India, with its rich mineral, forest, natural and local resources. The Post-Graduate Programme in Management (PGP) was started in 2010, whereas Fellow Programme in Management (FPM) & Executive Fellow Programme in Management (EFPM) was started in 2013. Executive Post-Graduate Programme (ePGP) was started in 2021. IIM Raipur has grown and improved in quality, as evidenced by the NIRF ranking of management institutes, which moves up from 18th in 2016 to **11th** in 2023.

IIM Raipur offers top-notch management education on its 200-acre, state-of-the-art well-equipped lecture rooms, a library, a simulation lab, and a pleasant lodging campus in Atal Nagar, Naya Raipur. With the goal of becoming a highly regarded business school worldwide, IIM Raipur has partnered with numerous business schools in Europe, South America, Australia, New Zealand, and the United States for faculty and student exchange Programmes.

## LOCATION

The IIM Raipur campus is located about 20 minutes' drive from the Swami Vivekananda Airport, Raipur.

For any Correspondence / Administrative enquiries, please feel free to contact below:

#### EL&D Office:

Indian Institute of Management Raipur,

Atal Nagar, P. O. - Kurru (Abhanpur)

Raipur – 493 661, Chhattisgarh, India

Phone: +91 771 2474 697

E-mail: eldc\_office@iimraipur.ac.in