15 Days Online Workshop
on
"Data Science and its Applications"
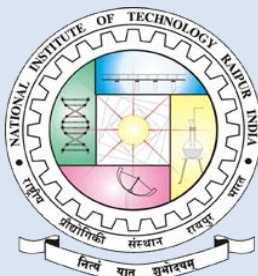
(13th Jan 2025 – 29th Jan 2025)

(6.00 PM – 8.00 PM)

Call for participation and registration

Organized by

Department of Computer Science & Engineering

National Institute of Technology Raipur-492 010 (Chhattisgarh)

www.nitrr.ac.in

ABOUT THE INSTITUTE

National Institute of Technology (NIT) Raipur, formerly known as Government Engineering College (GEC) Raipur, is established in 1956. The institute has established its unique identity for the development of high-quality human and knowledge resources. It was declared as 'National Institute of Technology' by the Government of India on 1st December 2005 and then an 'Institute of National Importance' in May 2007 vide the National Institute of Technology Act 2007. With over six decades of glorious history as a premier technical education institution in India, NIT Raipur now offers 12 UG and 11 PG programs. In addition to the UG and PG programs, NIT Raipur also offers Ph.D. in 18 disciplines of science and technology.

ABOUT THE DEPARTMENT

The **Department of Computer Science & Engineering** came into existence in year 2000. CSE department is the study, research and work place of approximately 300 students from the 28 states across India. The department provides an outstanding research environment and offers academic program leading to the award of B. Tech, M. Tech, and Ph.D. degree.

WORKSHOP OBJECTIVES

The objective of this workshop is to provide all the participants with a comprehensive understanding of the principles, techniques, and tools of data science. It aims to bridge the gap between theoretical knowledge and practical implementation by exploring how data science can be applied to solve real-world problems across various domains. Participants will gain insights into data preprocessing, machine learning, deep learning, data visualization, and decision-making processes, empowering them to harness the power of data for innovation and impact.

WHO SHOULD ATTEND?

Students, research scholars, and faculties of Engineering and basic sciences of educational institutes and industry professionals.

RESOURCE PERSONS

Academicians from IITs and NITs and Industry are invited to deliver the lectures and to share their research experience in the field of Data Science. Experts from industry also invited as speaker for this programme.

SELECTION

Since the number of seats is limited, the selection process will be made on first come first basis. However, the preference will be given to the outside participants. Intimation regarding selection will be sent to the candidates by e-mail as per schedule date.

CERTIFICATES

E-Certificate will be issued to the participants only after attending the complete course.

TOPICS TO BE COVERED

- Introduction to Data Science
- Purpose and Components of Python in Data Science
- Mathematical Computing with Python
- Scientific Computing with Python
- Data Manipulation with Pandas
- Prediction using Scikit-Learn
- Random Variables and Distributions
- Exploratory Data Analysis
- Quantitative and Graphical Techniques
- Feature Generation and Feature Selection
- Clustering Techniques
- Nearest Neighbours Algorithm
- Data Visualization
- Statistical Foundations for Data Science
- Regression
- Hypothesis Testing
- PCA and SVD
- Data Wrangling
- Predictive Analytics
- Natural Language Processing
- Generative AI
- Ethical Issues: Privacy and Security
- Next Generation Data Scientists
- Recommender Systems
- Case Studies on Data Science

CHIEF PATRON

Dr. N. V. Ramana Rao
Director
National Institute of Technology Raipur, India, 492010

PATRON

Dr. G. P. S. C. Mishra
Dean (Research & Consultancy),
National Institute of Technology Raipur, India, 492010

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REGISTRATION FEE DETAILS (INR)

Participants	Amount (in Rs)
NITRR Students	Rs. 1000+18% GST (Rs. 1180/-)
External UG/PG/Ph.D./NITRR Staff	Rs. 1500+18% GST (Rs. 1770/-)
Industry Persons/Govt. Employees/Faculty	Rs. 2000+18% GST (Rs. 2360/-)

ACCOUNT DETAILS

Account Name: Director NIT Raipur
Account No.: 38027633250
Bank Name: State Bank of India
IFSC Code: SBIN0002852

Candidates have to fill the google form and upload the receipt of payment proof and ID (Aadhar card/Voter ID/Driving License). Selected candidates will be informed by email as per schedule. Certificates will be issued to the participants only after attending the complete course.

GOOGLE FORM LINK

For online Registration go through the following link:
https://forms.gle/eg88tXYa6MT6Ai279

IMPORTANT DATES

Last Date of Registration: 8th January 2025
Intimation of Acceptance: 10th January 2025
STTP Dates: 13th to 29th January 2025