REGISTRATION FORM

Online One Week Short Term Course on

Data Analytics and Predictive Technologies

(5th -10th July 2021)

Under the aegis of

Interdisciplinary Data Analytics and Predictive Technology (IDAPT)

Name
Designation
Institute
Gender: Male / Female
Postal Address
Email ID
Telephone / Mobile No
Undertaking:
I shall abide by rules and regulations and shall
attend course. Failing which certificate may not
be issued.
Signature of Candidate
(With date)

ORGANIZING TEAM

Patron and Advisor

Prof. Pramod Kumar JainDirector, IIT (BHU), Varanasi

Coordinator, IDAPT

Prof. Rajiv Prakash Dean (R&D), IIT (BHU), Varanasi

Course Coordinator

Prof. Sanjay Kumar Singh

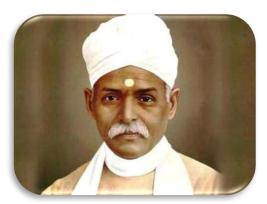
Professor & Head Department of Computer Science & Engineering Indian Institute of Technology (BHU), Varanasi

Course Co-Coordinator

Dr. Rajeev Kumar Singh

Associate Professor Department of Electrical Engineering Indian Institute of Technology (BHU), Varanasi

FOUNDER OF THE BANARAS HINDU UNIVERSITY



Pandit Madan Mohan Malaviya



One Week Short Term Course
On
Data Analytics and
Predictive Technologies
05-10 July 2021



SUPPORTED BY



A TECHNOLOGICAL INNOVATION HUB ON INTERDISCIPLNARY DATA ANALYTICS AND PREDICTIVE TECHNOLOGY (IDAPT)

INTRODUCTION

Recently, data analytics has become very popular and frequently used in any business. Businesses today around the world have some portion of their operations being automated, which concurrently has meant that a lot of data about these processes is being collected (from sensors or internal company data etc). A combination of AI, big data analytics, and data science techniques seems to be a growing trend in many industry sectors, with predictive analytics being one of the most well-known. Vast numbers of software platforms are available for data extraction, scrubbing, analysis, and visualization. Some of these platforms are specialized for carrying out one of the above-listed aspects of data analytics, while others offer a generalist tool to carry out almost all tasks ranging from data scrubbing to visualization. This course gives an overview of different data analytic mechanisms and also provides a brief knowledge of various data analytics tools. After the competition of this course, participants can apply the data analytics model in reallife problem solving.

COURSE CONTENTS (Tentative)

- Data Analytics Scope & Applications
- Data Analysis Techniques
- Predictive and Descriptive Data Analysis
- Introduction to Statistical Learning
- Introduction to Python for Data Analytics
- Regression & Classification Problems
- Linear and Logistic Regression
- Decision Trees, Support Vector Machines
- K-NN Algorithm, Principal Component Analysis, Cluster Analysis
- Deep Learning: Deep Neural Network,
 Convolutional Neural Network,
- Recurrent Neural Network.
- Introduction to transfer Learning
- Analyzing the categorical data, streams data etc.
- Applications in Health, Energy, Agriculture, Smart Infrastructure etc.

EXPERTS

Subject experts will be drawn from premier institution like IITs, NITs and industry.

PROGRAM DURATION

One Week (5-10 July 2021)

Short term course will be conducted in ONLINE MODE. Link will be shared to registered participants

WHO CAN PARTICIPATE?

This program can be attended by all UG/PG/PhD students, faculties and researchers from any branch of Engineering/ Science who are interested to work in the field of Data Analytics.

REGISTRATION

Registration Link:

https://forms.gle/VW8AghkSZy84GfpL7

Intending participants are requested to register their names by filling the online registration form.

Last Date of Registration: 30 June 2021

Registration Fees: No registration fee

Course Mode: Online

ABOUT THE INSTITUTE

The Indian Institute of Technology (Banaras Hindu University) owes its existence to Mahamana Pandit Madan Mohan Malviya, Bharat Ratna-the founder of the first residential university of modern India.p the Banaras Hindu University. The three of the erstwhile engineering colleges of BHU, namely BENCO, MINMET and TECHNO, were merged to form the Institute of Technology (IT-BHU) in 1968 to provide an integrated educational base. The IT-BHU has been admitting students through the JEE conducted by the IIT's since 1972, and has been consistently ranked amongst the top few engineering institutions of the country. IT-BHU became IIT (BHU) in June 29, 2012 by an Act of Parliament. The Institute has maintained high academic standard since its inception. It has turned out luminary engineers and administrators who served the nation with great distinction.

NM-ICPS and IDAPT

The National Mission on Cyber-Physical Systems (NM-ICPS) is identified as one such emerging field to have a significant impact on health care, urban transportation, water distribution, energy, urban air quality, manufacturing and governance. The activities envisioned under this Mission will give a impetus to Indian manufacturing via the invention of new products, services and the creation of skilled young human resource from technicians to, researchers and entrepreneurs. It will have modernisation and digitalisation of socio-technical systems and services. The Interdisciplinary Data Analytics and Predictive Technologies (IDAPT) has been regarded as one of the most prominent fields whose progress will add significant impact on various socio-economic issues. At IIT (BHU) five verticals 1) Telecommunications, 2) Power, 3) Road Transport and Highways, 4) Defence Research and Development, and 5) Health and Family Welfare have been identified under IDAPT. The endeavour shall catalyse the creation of skilled young engineers, researchers, technicians, and entrepreneurs, together with human resource at all levels, besides becoming a key contributor to realizing the vision of "Digital India", "Innovate in India", and "Make in India".

ADDRESS FOR CORRESPONDENCE

Prof. Sanjay Kumar Singh
(Course Coordinator)

Department of Computer Science & Engineering
Indian Institute of Technology (BHU)

Varanasi-221005, UP, India

Email: coordinatorstc.idapt@gmail.com

