Online Short-Term Training Programme (STTP) on "**Data Science and Statistical Analysis through R and Python Software**"
10 May - 14 May, 2023

Organized by

Department of Mathematics and Humanities,

S. V. National Institute of Technology, Surat - 395007, Gujarat, India

In Association with the
CCE, SVNIT

ABOUT SVNIT

The Institute, one of the pioneering engineering institutions of the country, was established in 1961 as Sardar Vallabhbhai Regional College of Engineering & Technology and was given a status of National Institute of Technology, in 2002. At present, there are Six undergraduate courses, Eighteen postgraduate courses, Three M.Sc. Five years Integrated Programme and PhD programme

in all disciplines of engineering and applied sciences. It has an excellent placement record with a number of top- ranking companies visiting the campus. The whole campus has connectivity of the internet with fiber optic network including faculty quarters and student hostels.

The Department of Mathematics & Humanities has always believed in striving for excellence in research and teaching and succeeded in this endeavour to a large extent. Over the years, the department has evolved as one of the epicenter of research in Gujarat, India.

In the pursuit for research the Faculty members of the department have covered a vast area such as Probability & Statistics, Algebra, Coding theory, Numerical & Classical methods in fluid mechanics, Special functions, Integral Transforms, Approximation theory, Operator theory and Fuzzy logic, Mathematical Modeling, Numeric of differential equations, fractional differential equations, Mathematical and Computational Biology, Bioinformatics, Techno innovation to Techno entrepreneurship, General Management, Entrepreneurship, Marketing, Post Modern Fiction and Indian English Fiction.

ABOUT CCE

Center for Continuing Education (CCE) was established in Feb-2017 at SVNIT with Prime objective to imparting skill developing training programs to faculty, research scholars, UG/PG students, industry professional through planning and organizing Workshop/STTP/Expert talks on the concept of Self-Sustainability approach as per MHRD Guide-lines.

PATRON

Prof. Anupam Shukla
Director,
SVNIT, Surat.

CHAIRMAN

Dr. Jayesh M. Dhodiya
Associate Professor & HOD
Department of Mathematics and Humanities,
SVNIT, Surat.

COORDINATORS

Dr. Raj Kamal Maurya
Assistant Professor
Department of Mathematics and Humanities,
SVNIT, Surat
&
Dr. Sourav Gupta
Assistant Professor
Department of Mathematics and Humanities,
SVNIT, Surat.

PROGRAMME OBJECTIVE

In this world of overloaded information and data explosion, there is a need to leverage this data and make sense of it entirely. R is rapidly becoming the leading programming language for effective data analysis and statistics. R Programming is a training program that aims at building a skill-set towards real-world data analysis challenges as a data engineer.

Since the data science industry is rapidly expanding. Data volume can be large due to which difficulties arise in handling the data and the whole procedure will be much more time consuming. In this case the Python is a very popular tool in scientific computing, because it has many data-oriented feature packages that can speed up and simplify data processing.

This training program is targeted at Bachelor, Master, PhD students, Post-docs, Faculties, Engineers & Researchers from numerous areas of science and technology. In these five days course, first two days aims to introductory sessions followed by basics of R software in statistics and data analysis. The speaker will introduce Python software for data analysis over next three days. The data analysis based on several important topics will be covered by the speakers.

You'll Learn

Statistical Analysis

✧ Discrete and Continuous Random Number Generation using R, Goodness of Fit, Statistical Test, MLEs and Confidence Intervals, Survival Analysis, MCMC, Optimization, Different kind of Plots.

Data Processing

✧ Missing value imputation, Testing, Training and Splitting Data.

Algorithms

✧ Regressions, Logistic Regression, Tree Based Algorithm, SVM, PCA, Simple Feed Forward Deep Learning, Time Series Analysis, Class Imbalance Problem, Multiclass Classification, Model Evaluation / Cross Validation.

WHO CAN ATTEND?

Though there is no limit, this training program is open to Industry persons, Research scholars, Postdocs, UG and PG students.

Notice:

❖ Participants are advised to keep laptops for hands-on practice during all sessions.

❖ The certificate of participation will be issued to all candidates after completion of the program.

❖ Time: 10:00 AM Onwards.

EXPERTS & TUTORS

❖ **Dr. Ritwik Bhattacharya**
Assistant Professor
University of Texas at El Paso, USA
❖ **Dr. Tanmay Sen**
Data Scientist at Ericsson, Kolkata
❖ **Dr. Chandrakant Lodhi**
Assistant Professor
Energy Institute Bengaluru, a centre of RGIPT
❖ **Mr. Vaibhav Shakya**
Data Scientist at CDAC, Pune
& Other experts from leading institute as IITs, NITs.

REGISTRATION

Details of account for Program Fee Submission:

Account Holder Name: **Director, SVNIT-CCE**

SBI Account Number: **37030749143**
Branch Name: **SBI, SVRCET Branch**
Bank IFSC: **SBIN0003320**
NOTE: Please mention "**DOMH_STTP_2023**" in the description/ remark during payment and attach payment proof while registering through Google Form.

➢ **Online Registration link:**
  Click here for Registration

ORGANIZING COMMITTEE

Patron: Prof. Anupam Shukla

Chairman: Dr. Jayesh M. Dhodiya

Coordinators:

Dr. Raj Kamal Maurya
Dr. Sourav Gupta

Contact Details of Coordinators:

Dr. Raj Kamal Maurya
Dr. Sourav Gupta
Department of Mathematics and Humanities,
S. V. National Institute of Technology,
Ichchhanath,
SURAT -395007, GUJARAT, India.

Email: rkm@amhd.svnit.ac.in,

sgupta@amhd.svnit.ac.in

Contacts: 7761897529, 9804058229.