





# 7-Day High-End Workshop on

# Real-life Data Modeling via Statistical and Machine Learning Tools

Organized by School of Data Science

Indian Institute of Science Education and Research Thiruvananthapuram

Dates: January 8-14, 2024

Sponsored by SERB-Karyashala

### **About the Workshop**

The **KARYASHALA** scheme, initiated by SERB, Govt. of India, is to enhance skill development training on emerging topics essential for scientific research. This workshop is specifically tailored for PG and Ph.D. students from universities and colleges seeking a comprehensive understanding of statistical and Machine Leaning tools for data modeling.

- The workshop aims to give an overview of various statistical and machine learning modeling tools developed in recent times.
- The workshop will help to develop a clear, in-depth understanding of adapting appropriate tools for modeling real-life data. Moreover, it will enhance participants' overall statistical analytical ability for extracting actionable information from data.
- The hands-on sessions are designed to provide aspiring researchers with a comprehensive outlook on three of the most popular programming languages used for statistical modeling and machine learning, namely MATLAB, Python and R.

#### **About IISER TVM**

IISER Thiruvananthapuram, located in Kerala, is an institute of national importance established by the Government of India in 2008. IISER Thiruvananthapuram has positioned itself as a vibrant center for outstanding research and teaching.

IISER Thiruvananthapuram awards Bachelor of Science and Master of Science (BS-MS) dual degrees and Doctor of Philosophy (Ph.D.) degrees in Mathematics, Data Science, Physics, Chemistry, Earth, Environmental and Sustainability Sciences, and Biology. IISER TVM also offers two-year M.Sc degree in basic sciences.

Multidisciplinary research at IISER Thiruvananthapuram has been recognized internationally with active participation in several international projects and collaborations with foreign institutions. IISER Thiruvananthapuram's dynamic campus, cultural diversity, and the notable achievements of its alumnifurther contribute to its status as a hub for excellence in education and innovation.



# **About the Department**

The School of Data Science at IISER TVM currently offers a 5-Year (i2 Sciences) BS-MS programme with faculties specialising in Applied Statistics, Artificial Intelligence, and Machine Learning. It aims to empower students by providing them with outstanding computational and technical resources, access to cutting-edge research facilities, exposure to the industrial world, and ample placement opportunities.

## **Speakers**

- 1) Prof. P. G. Sankaran Vice Chancellor, CUSAT
- 3) Prof. Sanjeev Sabnis IIT Bombay
- 5) Dr. Prajamitra Bhuyan IIM Kolkata
- 7) Dr. Nagaiah Chamakuri IISER Thiruvananthapuram
- 9) Dr. Shyamal Ghosh IISER Thiruvananthapuram
- 11) Dr. Alwin Poulose Palatty
  IISER Thiruvananthapuram

### **Course Content**

- Survival Data Analysis
- Clinical Trials
- Clinical Data Analysis with hands on session in Python
- Machine Learning with MATLAB
- Financial Data modelling with hands on session in R

**Application Deadline: 19th December, 2023** 

Registration Link: <u>Google form</u>
Registration Fee: No registration fee

For any queries, feel free to contact us at program.dsc@iisertvm.ac.in



- 2) Prof C Satheesh Kumar University of Kerala
- 4) Prof. Amit Mitra
  IIT Kanpur
- 6) Dr. Rahul Thekkedath, Reserve Bank of India
- 8) Dr. Muhammed Anvar P Kannur University
- 10) Dr. Priyanka Majumder

  IISER Thiruvananthapuram
- 12) Dr. Saptarshi Bej
  IISER Thiruvananthapuram

# **Registration Guidelines**

- The maximum number of participants is limited to 25.
- **Eligibility**: BS-MS (4th and 5th year), PG and Ph. D. students.
- **Travel Support**: Students selected for this workshop will be offered travel support (AC 3-Tier) for their journey to and from IISER TVM, as per SERB and GoI norms.
- **Accommodation and Food**: Free accommodation and food will be provided for all the selected students for the entire workshop duration.
- During registration, the candidate must upload an NOC letter duly signed by the competent authority.
- Based on the screening, selected students will be informed through email, by 20th December 2023.



Address: IISER Thiruvananthapuram, Maruthamala P. O,

**Govind Ram** 

Kondaveeti Tejaswi

**Coordinator: Dr. Shyamal Ghosh** 

Email ID: shyamal@iisertvm.ac.in

Co-Organisers: Dr. Priyanka Majumder

**Dr. Alwin Poulose Palatty** 

Dr. Saptarshi Bej



Vithura, Kerala 695551, INDIA

Madala Vikas

#### Format for NOC

Date:

To Dr. Shyamal Ghosh Workshop Coordinator

This letter is to certify that [Student's Full Name], a PG student/Ph.D. Scholar of [School/Institution Name], has sought permission to attend the 7-day High-End workshop on **Real-life Data Modelling via Statistical and Machine Learning Tools**, which is scheduled to take place during **January 8 – 14, 2024 at IISER Thiruvananthapuram**.

We hereby confirm that we have no objection to the applicant attending the workshop and encourage his/her participation in such educational events that can further enhance knowledge and skills.

Name and Signature of the applicant: Date and Place:

Recommended and forwarded by

Name and Signature of the Head of the Department/ Head of the Institution with seal

