

# Data-Driven Analysis and Decision-Making in Healthcare Workshop

## Purpose:

The workshop will focus on applying modern statistical methods, machine learning, optimization, and simulation to healthcare. Topics include diagnosis, treatment planning, clinical trials, and performance evaluation, with an emphasis on improving outcomes through data-driven insights.

This one-day event brings together healthcare professionals and academicians to discuss how advanced analytical techniques can address complex challenges and enhance decision-making in the field.

Clinical trials ensure the safety and efficacy of treatments, but choosing the best option often requires evaluating survival rates, quality of life, costs, and other qualitative factors. Data-driven approaches offer valuable support in making evidence-based treatment decisions.

The sessions are planned to explore challenges and decision-making in different areas of health care.

**Date: 4th January, 2024**

**Time: 9 am onwards**

**Venue: Seminar Hall, Vanvihar, IIT Bombay**

## Tentative Session Plan:

Time	Title	Speaker
9:00 - 9:30	Breakfast	-
9:30 - 9:40 AM	Introduction to workshop	Narayan Rangaraj, IIT Bombay
9:40 - 10:00	Diabetic Retinopathy Classification using Mobile Net V2 on Mobile Platform	Sridhar Anjanappa, UnivLabs Sudhiranjan Dash, Sir H N Reliance Foundation Hospital
10:00 - 10:20	Simulation Modelling for Healthcare Delivery Systems	Varun Ramamohan, IIT Delhi

10:20 - 10:40	Data-Driven Application Systems for Medical Procedures: Innovations in Training, Planning, and Guidance	Saurabh Jain, IIT Bombay
10:40 - 11:00	The Impact of AI in Therapeutic Advancements-Radiation Oncology	Dr. Unmesh Mukherjee, Nanavati Hospital
11:00 - 11:30	Tea Break and Posters Presentation	-
11:30 - 11:50	Navigating the Operating Room with Data and AI: Unlocking Performance in Advanced Surgical Systems	Sridhar Anjanappa, UnivLabs
11:50 - 12:10	Revolutionizing Healthcare Decisions with Data Science Techniques	Manoj Kumar, NIT Jalandhar
12:10 - 12:30	Optimizing Cancer Screening Policies and Analyzing the Impact of Policy Intervention in Healthcare Management	Utkarsh Verma, York University
12:30 - 12:50	Health care research in India	Sanjay Mehendale, Hinduja Hospital
12:50 - 1:10	Challenges in Adoption and Evaluation of Health Technology, Focussing on Neurosurgery	Aliasgar Moiyadi, TMH Mumbai
1:10 - 1:30	Ongoing Public Health Projects at TCTD	Santosh Norona, IIT Bombay
1:30 - 2:30	Lunch at Gulmohar Banquet Hall	-
2:30 onwards	Discussion and Closing Ceremony	-