

## OBJECTIVE

This workshop aims to provide students, researchers, and professionals with a foundational and practical understanding of Data Engineering and Machine Learning(D-ML2025) using Databricks Free Edition

## HIGHLIGHTS

- Hands-on sessions with real datasets
- Expert talks from academia & industry
- Projects & coding exercises
- Certification for participants

## TARGET AUDIENCE

- UG/PG Students
- Research Scholars
- Faculty Members
- Industry Professionals
- Anyone interested in AI & ML

## PREREQUISITE

- Basic knowledge in Python and SQL
- Sign up for Databricks Free Edition
- <https://www.databricks.com/learn/free-edition>
- Laptop with Internet Access

## Focus Areas:

- Introduction to Data Engineering
- Storage formats
- Access options
- Introduction to Delta Lake
- DevOps Lifecycle
- Introduction to Machine Learning
- Types of machine learning problems
- MLOps Lifecycle
- Classification Problem
  - Spam or Not Spam
- Problem Discussion
- Approach
- Model Build and Verification
- Regression Problem
  - Student Final Grade Prediction
- Problem Discussion
- Approach
- Model Build and Verification

## Patron

**Rev. Fr. Dr. M. Swaminathan**

Secretary, St. Joseph's College of Arts & Science  
(Autonomous), Cuddalore - 607 001.

## In the Presence of

Dr. M. Arumai Selvam, Principal  
Dr. J. Jon Arockiaraj, Senior Vice-Principal  
Rev. Fr. Dr. S. Xavier, Controller of Examinations  
Rev. Fr. Dr. A. Alex, Dean of Studies  
Rev. Fr. Dr. S. Charles Edison, Director, Sports & Media  
Dr. I. Savarimuthu, Vice-Principal (Shift-I)  
Dr. R. Vidya, Vice-Principal (Shift-II)  
Dr. P. James Mary, Vice-Principal (Shift-II)

## Resource Person

**Mr. Vimal Thomas Joseph**

Specialist Solution Architect at Databricks,  
Louisiana, United States

## Convenor

**Dr.A.John Pradeep Ebenezer**

HOD, PG Department of Computer Applications.

## Organizing Secretaries

**Dr.Z.John Bernard**

Assistant Professor, PG Department of Computer Applications.

**Dr.J.Robert Adaikalaraj**

Assistant Professor, PG Department of Computer Applications.