



INDIAN STATISTICAL INSTITUTE

SQC & OR Unit, HYDERABAD



This is to certify that
Bolla Manikanta Yuvaraju

has Participated in the
Training Programme (online) on
Machine Learning
organized during July - September 2023

Date : 30 October 2023


(Dr. G S R Murthy)
Course Director


(Dr. S M Subhani)
Head, SQC & OR Unit

(Course Coverage is given overleaf)

Coverage

Statistical Tools for Machine Learning

- Introduction to Machine Learning
- Statistical modelling
- Assessing model accuracy
- Brief introduction to handling statistical data using Python
- Linear regression
- Classification
- Logistic regression
- Discriminant analysis
- K-nearest neighbourhoods
- Cross validation and bootstrapping
- Linear model selection and regularization
- Polynomial regression
- Regression splines
- Generalized additive models
- Tree-based methods – decision trees, bagging, random forests, boosting
- Support vector machines; Unsupervised learning – principal component analysis, clustering.