Course Content
Of
Capacity Building Programme - Data Science

Introduction to Data Science, Use GitHub to manage data science projects
Introduction of Python, Python for Data Science
Mathematical foundation for data science, Introduction to Probability
Regression Analysis, Practical on Regression Analysis
Hypothesis testing -I, Hypothesis Testing -II
Map-reduce and related paradigms Map reduce, Practical on map reduce
Clustering: Graph Clustering
Feature Engineering: Feature selection, Dimension Reduction
Exploratory Data Analysis Techniques
Practical of exploratory data analysis techniques
Database: Data Models, Query languages: Structured Query Language;
Database Design: Entity Relationship Modeling, Practical on Database
Descriptive Statistics and Inferential Statistics
Practical on Statistics, Inferential Statistics
Unstructured databases: NoSQL
Key Value store/Document Store, Tableau
Discussion on research direction in data science