Data Science Course in R

DATA ANALYTICS WITH R

- Data Science Introduction & Use Cases
- R Basics: Basic Syntax, Variable assignment, Data Types-numeric, string, boolean
- R Basics: Vectors, Matrices, Factors, Data Frames, ListsLoops, If-elif statements, Functions, Exception Handling
- Statistics, Measures of central tendency, Population, Sample, Probability Distribution, Normal and Binomial Distribution, Random Variable, Pictorial Representations
- R Advanced: Libraries
- R Advanced: Data Manipulation, plots
- Exploratory Data Analysis: Data Cleaning, Data Wrangling

MACHINE LEARNING

- ML Introduction & Use Cases
- Statistics 2 – Inferential Statistics
- Linear Regression
- Logistic Regression
- Decision Trees, Random Forest
- Modelling Techniques (PCA, Feature Engineering)
- KNN, Naive Bayes
- Support Vector Machines(SVM)
- Clustering, K-means

DEEP LEARNING WITH NLP

- Introduction to NLP & Deep Learning
- Word Embeddings
- Word window classification
- Introduction to Artificial Neural Networks
- Introduction to MxNet
- Recurrent Neural Networks for Language modelling
- Gated Recurrent Units(GRUs), LSTMs
- Recursive Neural network

ADVANCED MACHINE LEARNING

- Market Basket Analysis & Apriori Algorithm
- Recommendation System
- Dimensionality Reduction
- Anomaly Detection
- XG Boost
- Gradient Boosting Machine(GBM)
- Stochastic Gradient Descent(SGD)
- Ensemble Learning