Indian Institute of Technology Kharagpur
Vinod Gupta School of Management
Proposed Faculty Development Programme on
Data Analytics and Applied Machine Learning using R
for Faculty Members of VAMNICOM [5 – Day Programme]
Location: Vinod Gupta School of Management (VGSOM), IIT Kharagpur
Suggested Dates: 24th to 28th June, 2019
<u>Proposed Schedule</u>

Day 1	
Session 1#	Introduction to Big Data Analytics
Session 2	Basic Data Handling with R Programing
Session 3	More Data Handling with R Programing
Session 4	Basic Statistics and Probability, Probability Distributions
Day 2	
Session 1	Hypothesis Testing – t test
Session 2	Hypothesis Testing – F test and ANOVA, Chi square test
Session 3	Linear Regression
Session 4	Project-1
Day 3	
Session 1	Logistic Regression
Session 2	Machine Learning Technique – Artificial Neural Network
Session 3	Machine Learning Technique – Decision Tree
Session 4	Project - 2
Day 4	
Session 1	Machine Learning Technique – Naïve Bayes for Sentiment Analysis
Session 2	Dimension Reduction and Factor Analysis
Session 3	Cluster Analysis for Segmentation
Session 4	Project - 3
Day 5	
Session 1	Forecasting Techniques
Session 2	Forecasting Techniques
Session 3	Prescriptive Analytics
Session 4	Project - 4

All sessions are of 90 Min duration.

Resource Persons

Dr Swagato Chatterjee (B.Tech, IITKGP; FPM, IIM Bangalore)

Prof Swagato Chatterjee, an IIT-IIM alumni, has a rich client base for MDP and consultancy projects on analytics: Ernst & Young, Yes Bank, CSC, Namura, Mitsubishi, Toyota, GE, Times of India, Coca-cola, NTPC, HPCL, Indian Oil, Philips, RPG Group etc. He brings in a mixture of industry experience and academic knowledge in the class to cater to audience of different seniority levels.

Dr Sujay Bhattacharya (PhD, IIITM, Gwalior)

Prof. Sujoy Bhattacharya's area of interest is business analytics. Prof. Bhattacharya is proficient in R and Python softwares. Prof. Bhattacharya can handle complex business analytics problems with varied applications.

Dr Arun Kumar Mishra (PhD, IIT Bombay)

After completing PhD, Prof. Arun Kumar Misra has worked in Banking Sector for about 7 years and then joined VGSOM, IIT Kharagpur. Prof. Misra's areas of research include banking, capital market, corporate finance and market micro-structure. Prof. Misra derives his competencies from the work experience in banks where he supervised risk management, ALM and Basel guidelines implementations.

Program Co-ordinator

Principal coordinator: Dr Swagato Chatterjee