Steps to become a Big Data Scientist

- Step 1 – Statistics
- Step 2 – Data Interpretation
- Step 3 – Big Data Analytics
- Step 4 – Machine Learning
- Step 5 – Artificial Intelligence

Step 1 – Statistics

Knowledge of Statistics Techniques.

- Aggregate functions like Mean, Medium & Mode
- Probability Theory
- Normal & Gaussian Distribution
- Confidence Intervals
- Hypothesis Testing
- Intro to Linear Regression

Data Interpretation, Business Intelligence & Business Insights

- Foundations of Statistical Modelling & Statistical Inference
- Sampling Strategies & Experimental Designs
- Understanding Sources of Data
- Generating Key Performance Indicators (KPI’s)
- Implementing Business Intelligence Solutions
- Interpreting Data Trends & Generating Business Insights
- Making Business Decisions based on Data Insights

Big Data Analytics with R & Python

- Analyze large and complex datasets with ease.
- Clean untidy datasets and merge datasets.
- Advanced data exploration and data mining.
- Advanced data visualizations and graphs.
- Machine learning with R & Python.

Machine Learning & Predictive Modeling

- Linear & Logistic Regression
- Classification – Decision Tree & Random Forest
- K-Means Cluster Analysis
- Bayesian ML : A/B Testing
- Support Vector Machines
- Recommender Systems
- Principal Component Analysis
- Intro to Natural Language Processing & Deep Learning
- Recommender Systems

Artificial Intelligence & Deep Learning

- Neural Networks
- Perceptron & Activation Functions
- Cost Functions & Gradient Descent Back propagation
- TensorFlows & Theano Implementation
- Convolution Neural Networks
- Recurrent Neural Networks
- Artificial Intelligence: Reinforcement Learning
- Vibrational Autoencoders
- Generative Adversarial Networks (GANS)