ANALYTICAL MODELS

# REGRESSION MODEL

1. Simple Regression
2. Multiple Regression
3. Polynomial Regression
4. Support Vector Regression (SVR)
5. Decision Tree Regression (CART – Classification and Regression Tree)
6. Random Forest Regression

# CLASSIFICATION MODEL

1. Logistic Regression
2. K Nearest Neighbours (K-NN)
3. Support Vector Machine (SVM)
4. KERNEL Support Vector Machine
5. Naïve Bayes
6. Decision Tree Classification (CHAID – Chai-Square Automatic Interaction Detector)
7. Random Forest Classification

# CLUSTERING MODEL

1. K Means Clustering
2. Hierarchal Clustering

# ASSOCIATION RULE LEARNING MODEL

1. Apriori
2. Elcat
3. Frequent Pattern Growth
4. Similis
5. One Attribute Rule
6. Zero Attribute Rule

# NATURAL LANGUAGE PROCESSING MODEL

1. Word Frequency and Relationship
2. Sentiment Analysis
3. Topic Modelling
4. Document Similarity & Classifier

# DEEP LEARNING MODEL

1. Artificial Neural Networks (ANN)
2. Convolutional Neural Networks (CNN)

# REINFORCEMENT LEARNING MODEL

1. Upper Confidence Bound (UCB)
2. Thompson Sampling

# DIMENTIONALITY REDUCTION MODEL

1. Principal Component Analysis (PCA)
2. Variable Inflation Factor (VIF)
3. Linear Discriminant Analysis (LDA)
4. Kernal PCA

# MODEL SELECTION

1. Model Selection
2. X-Boost

# VISUALIZATION MODEL

1. Scatter Plot
2. Histogram
3. Bar Chart
4. Pie Chart
5. Box Plot
6. Heat Maps
7. Time Line – Line Chart
8. Bubble Chart
9. Area Chart
10. Correlogram
11. Word Cloud
12. GeoSpatial Analysis

Note: R Libraries to be used – ggplot2, Plotly, Shiny, Leaflet, ggmap