**Machine Learning with R**

**USP:** Harness the power of machine learning systems by developing a solid understanding of the underlying design principles. A Leaning Path that will give readers a solid foundation in the machine learning design process, and be able build customized machine learning models to solve unique problems. One should be able to master machine learning techniques with R to deliver insights for complex projects.

**Audience**: Aimed for intermediate-to-advanced people (especially data scientist) who are already into the field of data science.

Books Selected:

**Machine Learning with R - Second Edition**

Table of Content:

1. Introducing Machine Learning
2. Managing and Understanding Data
3. Lazy Learning â€“ Classification Using Nearest Neighbors
4. Probabilistic Learning â€“ Classification Using Naive Bayes
5. Divide and Conquer â€“ Classification Using Decision Trees and Rules
6. Forecasting Numeric Data â€“ Regression Methods
7. Black Box Methods â€“ Neural Networks and Support Vector Machines
8. Finding Patterns â€“ Market Basket Analysis Using Association Rules
9. Finding Groups of Data â€“ Clustering with K-means
10. Evaluating Model Performance
11. Improving Model Performance
12. Specialized Machine Learning Topics

* Book has got good reviews on amazon.
* Selection of the above topics is the most appropriate choice for the defined learning curve.

**Machine Learning with R Cookbook**

Table of Content:

1: PRACTICAL MACHINE LEARNING WITH R

2: DATA EXPLORATION WITH RMS TITANIC

3: R AND STATISTICS

4: UNDERSTANDING REGRESSION ANALYSIS

5: CLASSIFICATION (I) – TREE, LAZY, AND PROBABILISTIC

6: CLASSIFICATION (II) – NEURAL NETWORK AND SVM

7: MODEL EVALUATION

8: ENSEMBLE LEARNING

9: CLUSTERING

10: ASSOCIATION ANALYSIS AND SEQUENCE MINING

11: DIMENSION REDUCTION

12: BIG DATA ANALYSIS (R AND HADOOP)

* Author himself was a Data Scientist and has that tone of writing which will captivate the readers and will impart skills to solve complex problems involved.

**Mastering Machine Learning with R**

1: A PROCESS FOR SUCCESS

2: LINEAR REGRESSION – THE BLOCKING AND TACKLING OF MACHINE LEARNING

3: LOGISTIC REGRESSION AND DISCRIMINANT ANALYSIS

4: ADVANCED FEATURE SELECTION IN LINEAR MODELS

5: MORE CLASSIFICATION TECHNIQUES – K-NEAREST NEIGHBORS AND SUPPORT VECTOR MACHINES

6: CLASSIFICATION AND REGRESSION TREES

7: NEURAL NETWORKS

8: CLUSTER ANALYSIS

9: PRINCIPAL COMPONENTS ANALYSIS

10: MARKET BASKET ANALYSIS AND RECOMMENDATION ENGINES

11: TIME SERIES AND CAUSALITY

12: TEXT MINING

* At the end we put this module which will give the readers to master the Machine Learning and serve are purpose.