Machine Learning & Data Science with R

8 Days Workshop from 11/04/2021 to 18/04/2021

Prof. T. R. Mahore

# Course Description

This course is designed in a way which will help students to understand the concepts of Machine Learning and Data Science. The concepts of Machine Learning and Data Science along with the R - Language. R - Language is one of the most popular language for implementing the Machine Learning and Data Science concepts.

# What you'll Learn

* R - Tool
* Data Visualization
* ML Fundamentals
* Applied Statistics

# Course Contents

1. Machine Learning and Data Science Introduction
2. Hand's on R - Programming for Machine Learning and Data Science
3. Machine learning fundamentals
4. Data visualization with R
5. Applied Statistics for Machine learning
6. Machine learning fundamentals (Models)
7. ANOVA with R
8. Linear Regression with R
9. Logistic Regression with R
10. Dimension reduction technique
11. Clustering with K-Means
12. Tree based models- CART & Random Forest
13. KNN- K Nearest Model
14. Naive Bayes
15. Neural Networks with R

# Course Schedule

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| **Sr. No.** | **Date** | **Topic** | **Time** |
| 1 | 11/04/21 | 1. Machine Learning and Data Science Introduction | 11.00 AM to 01.00 PM |
|  |  | 2. Hands on R |  |
| 2 | 12/04/21 | 3. Machine Learning Fundamentals | 04.00 PM to 05.00 PM |
| 3 | 13/04/21 | 4. Data Visualization with R | 11.00 AM to 01.00 PM |
|  |  | 5. Applied Ststistics for Machine Learning |  |
|  |  | 6. Machine Learning Fundamentals (Models) |  |
| 4 | 14/04/21 | 7. ANOVA with R | 11.00 AM to 01.00 PM |
|  |  | 8. Linear Regression with R |  |
|  |  | 9. Logistic Regression with R |  |
| 5 | 15/04/21 | 10. Dimension Reduction Technique | 04.00 PM to 05.00 PM |
| 6 | 16/04/21 | 11. Clustering with K - Means | 04.00 PM to 05.00 PM |
| 7 | 17/04/21 | 12. Tree based models - CART & Random Forest | 11.00 AM to 01.00 PM |
|  |  | 13. KNN - K Nearest Model |  |
| 8 | 18/04/21 | 14. Naive Bayes | 11.00 AM to 01.00 PM |
|  |  | 15. Neural Networks with R |  |