NPTEL Video Course - Mathematics - NOC:Essentials of Data Science With R Software 2: Sampling Theory and Line

Subject Co-ordinator - Prof. Shalabh

Co-ordinating Institute - IIT - Kanpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Stratified Random Sampling : Sample Allocation and Variances Under Allocation
Lecture 31 - Stratified Random Sampling : Drawing of Sample Using sampling and strata Packages in R
Lecture 32 - Stratified Random Sampling : Drawing of Sample Using survey Package in R
Lecture 33 - Bootstrap Methodology : What is Bootstrap and Methodology
Lecture 34 - Bootstrap Methodology : EDF, Bootstrap Bias and Bootstrap Standard Errors
Lecture 35 - Bootstrap Methodology : Bootstrap Analysis Using boot Package in R
Lecture 36 - Bootstrap Methodology : Bootstrap Confidence Interval
Lecture 37 - Bootstrap Methodology : Bootstrap Confidence Interval Using boot and bootstrap Packages in R
Lecture 38 - Bootstrap Methodology : Example of Bootstrap Analysis Using boot Package
Lecture 39 - Introduction to Linear Models and Regression : Introduction and Basic Concepts
Lecture 40 - Simple Linear Regression Analysis : Basic Concepts and Least Squares Estimation
Lecture 41 - Simple Linear Regression Analysis : Fitting Linear Model With R Software
Lecture 42 - Simple Linear Regression Analysis : Properties of Least Squares Estimators
Lecture 43 - Simple Linear Regression Analysis : Maximum Likelihood and Confidence Interval Estimation
Lecture 44 - Simple Linear Regression Analysis : Test of Hypothesis and Confidence Interval Estimation With R
Lecture 45 - Multiple Linear Regression Analysis : Basic Concepts
Lecture 46 - Multiple Linear Regression Analysis : OLSE, Fitted Model and Residuals
Lecture 47 - Multiple Linear Regression Analysis : Model Fitting With R Software
Lecture 48 - Multiple Linear Regression Analysis : Properties of OLSE and Maximum Likelihood Estimation
Lecture 49 - Multiple Linear Regression Analysis : Test of Hypothesis and Confidence Interval Estimation on I
Lecture 50 - Analysis of Variance and Implementation in R Software
Lecture 51 - Goodness of Fit and Implementation in R Software
Lecture 52 - Variable Selection using LASSO Regression : Introduction and Basic Concepts
Lecture 53 - Variable Selection using LASSO Regression : LASSO with R