

Keen interest and passion for ideas of data science and sincere desire to find patterns in the data.

Basic college algebra and familiarity with the computer environment.

No prior knowledge of statistical computing required, but again familiarity with computers essential

: Upon completing this 10 hour course, you should be able to claim a hands-on awareness of the following:

- [] Foundational working knowledge of R and R Studio as environments for exploring Applied Statistical Machine Learning and Practical Data Science. Basic introduction to the R Graphical User Interface (GUI) environment with R Commander and Rattle along with the Installation of some key R packages and most common CRAN Task Views. ()

- [] Elements of Exploratory Data Analysis (EDA) featuring most commonly used plots, graphs and statistical summaries along with distributional assessments, These two hours are dedicated in part to helping the audience get familiar with some key statistical concepts that ubiquitously permeate Statistical Machine Learning, Data Science and Artificial Intelligence ()

- [] Discovering practical regression with hands-on examples in R, plus fundamentals of interpreting regression outputs from basic concepts. This segment is used to introduce some of the most powerful

prostate

software engineering datasets

astronomy and astrophysics datasets

music data sets from qiuyi

epileptic seizure datasets

Turkiye student evaluation data sets

biology dataset from evolutionary molecular biology

datasets from the psych packages

ruspini datasets

```
library(ctv)
install.packages(psych)
install.views(MachineLearning)
install.views(HighPerformanceComputing)
Install.packages('ggplot2')
install.packages('rstan')
install.views('Bayesian')
  install.views('Cluster')
install.views('Robust')
install.views('Survival')
install.views('TimeSeries')
install.views('Psychometrics')
library(MASS)
library(RandomForest)
library(adabag)
library(ipred)
library(class)
library(e1071)
library(ElemStatLearn)
library(neuralnet)
library(glmnet)
library(elasticnet)
library(lasso2)
library(keras)
```