

Data Science with R

R Programming

- Introduction
- Installing
- R Studio
- Data Types
- Subsetting
- Vectorize Operations
- Control Structures
 - If-else
 - Loops
 - Repeat
- Functions
- Working with Dates
- Loop Functions
 - lapply
 - apply
 - mapply
 - tapply
 - split
- Debugging Tools
- Simulation
- Profiling

Loading and cleaning Data

Visualization and Reporting

- R Markdown
- Knitr
- Rpubs

Statistics With R

- Probability and Expected Value
- Variable, Distributions and Asymptotic
- Interval
- Testing
- P-values
- Power
- Bootstrapping

Regression Model

- Linear Regression
- Multivariable Regression
- Logistic Regression
- Poisson Regression

Machine Learning

- Prediction, Error and Cross Validation
- Caret Package
- Predicting with Tree
- Random Forest
- Modal based prediction
- Regularization
- Combining Predictors
- Forecasting
- Unsupervised Prediction