

# Data Visualization with R

## At a Glance

Data visualization is the presentation of data with graphics. It's a way to summarize your findings and display it in a form that facilitates interpretation and can help in identifying patterns or trends. In this course you will learn how to create beautiful graphics and charts, customizing the look and feel of them as you wish.

## ABOUT THIS COURSE

"A picture is worth a thousand words". We are all familiar with this expression. It especially applies when trying to explain the insight obtained from the analysis of increasingly large data sets. Data visualization plays an essential role in the representation of both small and large scale data.

One of the key skills of a data scientist is the ability to tell a compelling story, visualizing data and findings in an approachable and stimulating way. Learning how to leverage a software tool to visualize data will also enable you to extract information, better understand the data, and make more effective decisions.

The main goal of this course is to teach you how to take data that at first glance has little meaning and present that data in a form that makes sense to people. Various techniques have been developed for presenting data visually but in this course, we will be using the open source language R.

## COURSE SYLLABUS

### Module 1 - Basic Visualization Tools

- Bar Charts
- Histograms
- Pie Charts

### Module 2 - Basic Visualization Tools Continued

- Scatter Plots
- Line Plots and Regression

### Module 3 - Specialized Visualization Tools

- Word Clouds
- Radar Charts
- Waffle Charts
- Box Plots

#### **Module 4 - How to create Maps**

- Creating Maps in R

#### **Module 5 - How to build interactive web pages**

- Introduction to Shiny
- Creating and Customizing Shiny Apps
- Additional Shiny Features

### **RECOMMENDED SKILLS PRIOR TO TAKING THIS COURSE**

- Knowledge of R

### **REQUIREMENTS**

- R101