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The Creativity of your Mind

ROBOTRONIX ENGINEERING TECH PVT. LTD.



DATA SCIENCE PROGRAM

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About the Course

This Data Scientist accelerates your career in Data Science providing you with skills required to become successful in this domain. The program offers extensive training on the most in-demand Data Science and Machine Learning skills with hands-on exposure
to key tools and technologies including R, Python, Tableau, Become an expert in Data Science by deep diving into the nuances of data interpretation, interworking technologies like Machine Learning, and mastering powerful programming, Start learning, gain skills in this hugely in-demand field

Data Science in Real life

Data Science is the highly sought field of the century. Explore the truth about what Data Science is and hear from real practitioners telling real stories about what it means to work in Data Science and use cases for the same.

Key Learning Objectives

- Gain fundamental knowledge of what is Data Science and what do Data Science people do
- Learn about Data Science in a business context and what is the future of Data Science
- Understand Data Science applications and discover some use cases for Data Science

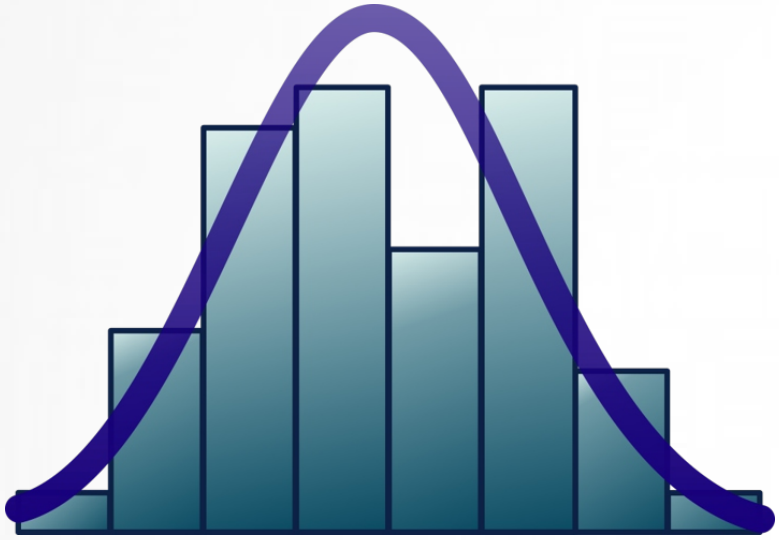
Course curriculum

- Lesson 1 - Defining Data Science
- Lesson 2 - What Does a Data Science Professional
- Do? Lesson 3 - Data Science in Business
- Lesson 4 - Use Cases for Data
- Science Lesson 5 - Data Science People

Statistics Essentials

After all of the hard work of acquiring data and getting them into a form you can work with, you ultimately want to make clear, succinct conclusions from them. This crucial step of a data analysis pipeline hinges on the principles of statistical inference.

Ace the fundamentals of Data Science, statistics, and Machine Learning with this course. It will enable you to define statistics and essential terms related to it, explain measures of central tendency and dispersion, and comprehend skew-ness, correlation, regression, distribution.



Course curriculum

- Lesson 1 - Introduction
- Lesson 2 - Sample or population data?
- Lesson 3 - The fundamentals of descriptive statistics
- Lesson 4 - Measures of central tendency, asymmetry, and variability
- Lesson 5 - Practical example: descriptive statistics
- Lesson 6 - Distributions
- Lesson 7 - Estimators and estimates
- Lesson 8 - Confidence intervals: advanced topics
- Lesson 9 - Practical example: inferential statistics
- Lesson 10 - Hypothesis testing: Introduction
- Lesson 11 - Hypothesis testing: Let's start testing!
- Lesson 12 - Practical example: hypothesis testing
- Lesson 13 - The fundamentals of regression analysis
- Lesson 14 - Subtleties of regression analysis
- Lesson 15 - Assumptions for linear regression analysis
- Lesson 16 - Dealing with categorical data
- Lesson 17 - Practical example: regression analysis

R Programming for Data Science

Oracle estimated over 2 million R users worldwide in 2012, cementing R as a leading programming language in statistics and data science. Every year, the number of R users grows by about 40%, and an increasing number of organizations are using it in their day-to-day activities.

Learning Objectives

- Learn about math, variables, and strings, vectors, factors, and vector operations
- Gain fundamental knowledge on arrays and matrices, lists, and data frames
- Get understanding on conditions and loops, functions in R, objects, classes, and debugging
- Learn how to accurately read text, CSV and Excel files plus how to write and save data objects in R to a file
- Understand and work on strings and dates in R

Course curriculum



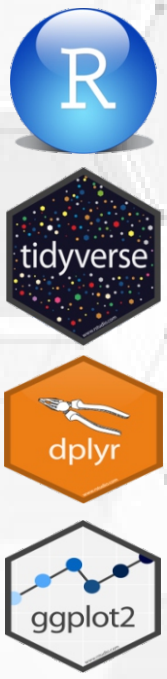
- Lesson 1 - R basics
- Lesson 2 - Data structures in R
- Lesson 3 - R Programming fundamentals
- Lesson 4 - Working with Data in R
- Lesson 5 - Stings and Dates in R

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Data Science with R

The next step to a data scientist is learning R - the upcoming and most in-demand open source technology. R is an extremely powerful Data Science and analytics language, with active community. This is why it is quickly becoming the technology of choice for organizations who are adopting the power of analytics for competitive advantage.

Course Curriculum



- Lesson 1: Introduction to Tidyverse
- Lesson 2 – Data Manipulation with dplyr
- Lesson 3 – Joining Data with dplyr
- Lesson 4 - Data Visualization with ggplot2
- Lesson 5 –Importing Data in R
- Lesson 6 –Cleaning Data in R
- Lesson 7 – Working with Date Times in R
- Lesson 8 –Exploratory Data Analysis in R
- Lesson 9 – Correlation and Regression in R
- Lesson 10 –Classification Supervised learning in R
- Lesson 11– Regression Supervised learning in R
- Lesson 12 –Unsupervised Learning in R
- Lesson 13 – Cluster analysis

Python for Data Science

Kick-start your learning of Python for Data Science with this introductory course and familiarize yourself with programming. Upon completion of this course you will be able to write your Python scripts, perform fundamental hands-on data analysis using the Jupyter- based lab environment, and create your own Data Science projects.

Key Learning Objectives

Write your first Python program by implementing concepts of variables, strings, functions, loops, conditions
Understand the nuances of lists, sets, dictionaries, conditions and branching, objects and classes
Work with data in Python such as reading and writing files, loading, working, and saving data with Pandas

Course curriculum

- Lesson 1 - Python Basics
- Lesson 2 - Python Data Structures
- Lesson 3 - Python Programming Fundamentals
- Lesson 4 - Working with Data in Python
- Lesson 5 - Working with NumPy arrays

Data Science with Python

This Data Science with Python course will establish your mastery of Data Science and analytics techniques using Python. With this Python for Data Science Course, you'll learn the essential concepts of Python programming and gain in-depth knowledge in data analytics, Machine Learning, data visualization, web scraping, and natural language processing. Python is a required skill for many Data Science positions

Course curriculum

- Lesson 1 – Data Manipultion with Pandas
- Lesson 2 – Data Visualization with matplotlib and seaborn
- Lesson 3 – Importing Data in Pythton
- Lesson 4 – Cleaning Data in Python
- Lesson 5 – Working with Date Times in Python
- Lesson 6 – Exploratory Data Analysis
- Lesson 7 – Statistical Thinking in Python I
- Lesson 8 -- Statistical thinking in Python II









Machine Learning

You'll augment your Python programming skill set with the toolbox to perform supervised, unsupervised, You'll learn how to process data for features, train your models, assess performance, and tune parameters for better performance

Course Curriculum



- Lesson 1– Supervised Learning with scikit Learn
- Lesson 2 – Unsupevised Learning in Python
- Lesson 3 – Machine Learning with Tree Based Models
- Lesson 4 – Cluster Analysis in Python

Tableau Desktop

Tableau is a widely used business intelligence (BI) and analytics software trusted by companies like Amazon, Experian, and Unilever to explore, visualize, and securely share data in the form of Workbooks and Dashboards. With its user-friendly drag-and-drop functionality it can be used by everyone to quickly clean, analyze, and visualize your team's data. You'll learn how to navigate Tableau's interface and connect and present data using easy-to-understand visualizations.

By the end of this course, you'll have the skills you need to confidently explore Tableau and build impactful data dashboards

Course Curriculum

- Lesson 1 - Getting Started With Tableau
- Lesson 2 - Building and Customizing Visualizations
- Lesson 3 -Digging Deeper
- Lesson 4 –Presenting Your Data
- Lesson 5 - Preparing for Analysis
- Lesson 6 – Exploring Visualizations
- Lesson 7 – Mapping Analysis
- Lesson 8 -Groups, Sets, and Parameters



For any further clarifications please feel free to contact us,
Warm Regards, **Thanking You**
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About Us

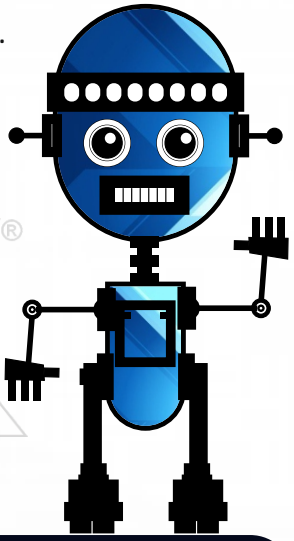
ROBOTRONiX is a "Centre for Innovation in Technology" **ROBOTRONiX Engineering Tech Pvt. Ltd.** ours is an organization driven by excellence in technology our domain concerns all the fields of engineering i.e. C.S., I.T., E.C.,E.X., E.E. & E.I. is a venture of the engineers for the engineers by the engineers we work on hands on technology for robot synthesis instead of simply assembling the same ,we are a trusted name amongst the student community and students have rested their faith on us from the last three years and we believe not on long term relationships but life time relationship we here at **ROBOTRONiX** are one well knit family and believe in extending support to the students through their technical voyage.

Our Services

- Scintillating Workshops
- Life Transforming Seminar
- Industrial Training
- Project Guidance
- Enlightening Guest Lectures
- Robots Synthesis
- Website & Software Building

WHY CHOOSE "ROBOTRONiX"?

- ✓ Extensive and well planned course structure from an industry point of view.
- ✓ Group Discussions.
- ✓ Mock Tests.
- ✓ Project Report Development Assistance.
- ✓ Documentation.
- ✓ DVD's containing all required Software, e-Books, Circuit Diagrams etc.
- ✓ Any work done is hosted and tested by student only.
- ✓ Training Certificate.



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