

# **TRAINING PROGRAMS**

For

Data Science and Al

# **Training Programs**

CodeForIndia has designed training programs to offer Data Science, AI and Machine Learning trainings to the students. Students gain exposure programming, to solving real world problems and various industry solution development activities. It aims to provide the students with the knowledge and skills required to perform in the industry.

#### **About the Courses**

The course sessions are structure to cover the basics to advanced Data Science and Machine Learning through either Python or R being the medium of scripting. The courses range from the foundational basics required, to advanced machine learning and industry-oriented business problem-solving. Through these courses one will learn the basics of data preparation and manipulation, data visualization, statistical analysis, machine learning, text analysis and deep learning. Every course is end-to-end and forms the pre-requisite for the next course in the series. The most engaging piece about the courses is the fact that they are designed to be a minimum of 70% hands-on and 30% theory based which gives the students the necessary exposure required to grow practically.

# Continuous Learning and Development

At CodeForIndia, the classroom sessions are designed to foster a continuous learning and development environment. We conduct interactive quiz sessions, hackathons, team-based projects to keep the students engaged and excited to learn. We believe the next decade requires a spurt of learning in Data Science and Artificial Intelligence and we want to be one of the big movers in the development of students at an early age.

Further, we provide a list of curated courses that we believe would be the best starting point for students in the second to fourth year of college since it would help them build up a foundation to grow over the next few years. We also expand our course list to provide for new courses based on what the industry requires and are customizable to the needs of the students.

## Title: Advanced Analytics with R (R-002)

Prerequisites - This course is for intermediate coders. It would be good to have completed the R-001 course prior to this.

**Course Duration - 40 hours** 

Course Fee - INR 5000

#### **Course Content:**

## Module 1: Data Preparation in R

- Understanding data types
- Understand how to deal with missing data
- Understanding data times and how to manipulate them
- Understand the working of apply functions

#### Module 2: Timeseries in R

- Understanding timeseries data in R
- How to perform basic forecasting in R
- Create timeseries plots in R

#### Module 3: Data Visualization in R

- Understanding different types of visualizations and their uses
- Using ggplot2 for data visualizations

## Module 4: Statistical Analysis in R

- Understanding regression for statistical analysis
- Implement various different types of regression algorithms

# Module 5: Basics of Text Mining and NLP

- Understanding Text Data
- Using RTextTools to mine text data and perform basic operations