



CodeForIndia

TRAINING PROGRAMS

For

Data Science and AI

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: ML with Python (PY-003)

Prerequisites - This course is for intermediate coders. It would be good to have completed the PY-001 and PY-002 course prior to this.

Course Duration - 50 hours

Course Fee - INR 6250

Course Content:

Module 1: Recap of basics of python and data preparation in python

- Reinstating the basics and data preparation techniques in python as a prerequisite to machine learning

Module 2: Introduction to Machine Learning with scikit-learn

- Introducing the machine learning flow and concepts
- Functions within scikit-learn
- Introduction to supervised and unsupervised machine learning

Module 3: Unsupervised Machine Learning

- Understanding unsupervised ML algorithms
- Introduction to clustering (k-means, SOM)
- Implementing clustering with real use cases

Module 4: Supervised Machine Learning

- Introduction to various supervised learning algorithms
- Understanding feature engineering and feature sets
- Understanding and implementing
 - Logistic Regression
 - Support Vector Machines
 - Decision Trees
 - Bayesian Networks
- Implementing the above algorithms with real use cases

Module 5: Evaluating machine learning models

- Understanding model selection and evaluation methods
- Optimize machine learning models