

Since 2007, Making IT Experts & Products

Course: Data Science

Duration: 90 Hrs (Changeable) | Fees: Individual / Batch

Since 2007, Nestsoft TechnoMaster has been providing training, internships, and services in IT technologies, both online and offline, with the expertise of **over 250 industry experts**. We have delivered internships, training, and seminars to more than 50,000 students, resulting in numerous success stories. **We offer 100% placement support through JobsNEAR.in**

Our Courses/Internship

- Python/Django Fullstack
- Artificial Intelligence
- Machine Learning
- Data Science
- Software Testing (All)
- Wordpress, Woocommerce
- Digital Marketing, SEO
- Php/MySQL, Laravel
- Flutter, Android, IOS
- Asp.net MVC
- Web Design, Javascript
- Angular JS, React JS
- CCNA, MCSA, CCNP
- AWS, GCP, Azure
- Odoo, Salesforce, Sap
- Microsoft Excel
- Ethical Hacking



Syllabus on the Next Page ..



Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

+91 9895490866

+91 8301010866

join@nestsoft.com

www.nestsoft.com

MODULE 1

- * The Data Science Process
- * Apply the CRISP-DM process to business applications
- * Wrangle, explore, and analyze a dataset
- * Apply machine learning for prediction
- * Apply statistics for descriptive and inferential understanding
- * Draw conclusions that motivate others to act on your results

MODULE 2

- * Communicating with Stakeholders
- * Implement best practices in sharing your code and written summaries
- * Learn what makes a great data science blog
- * Learn how to create your ideas with the data science community

MODULE 3


- * Software Engineering Practices
- * Write clean, modular, and well-documented code
- * Refactor code for efficiency
- * Create unit tests to test programs
- * Write useful programs in multiple scripts
- * Track actions and results of processes with logging
- * Conduct and receive code reviews


MODULE 4

- * Object Oriented Programming
- * Understand when to use object oriented programming

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 join@nestsoft.com

 www.nestsoft.com

- * Build and use classes
- * Understand magic methods
- * Write programs that include multiple classes, and follow good code structure
- * Learn how large, modular Python packages, such as pandas and scikit-learn, use object oriented programming
- * Portfolio Exercise: Build your own Python package


MODULE 5


- * Web Development
- * Learn about the components of a web app
- * Build a web application that uses Flask, Plotly, and the Bootstrap framework
- * Portfolio Exercise: Build a data dashboard using a dataset of your choice and deploy it to a web application

MODULE 6

- * ETL Pipelines
- * Understand what ETL pipelines are
- * Access and combine data from CSV, JSON, logs, APIs, and databases
- * Standardize encodings and columns
- * Normalize data and create dummy variables
- * Handle outliers, missing values, and duplicated data
- * Engineer new features by running calculations

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 join@nestsoft.com

 www.nestsoft.com

- * Build a SQLite database to store cleaned data

MODULE 7


- * Natural Language Processing
- * Prepare text data for analysis with tokenization,
- * lemmatization, and removing stop words
- * Use scikit-learn to transform and vectorize text data
- * Build features with bag of words and tf-idf
- * Extract features with tools such as named entity
- * recognition and part of speech tagging
- * Build an NLP model to perform sentiment analysis


MODULE 8

- * Machine Learning Pipelines
- * Understand the advantages of using machine learning pipelines
- * to streamline the data preparation and modeling process
- * Chain data transformations and an estimator with
- * scikit learns Pipeline
- * Use feature unions to perform steps in parallel and create
- * more complex workflows
- * Grid search over pipeline to optimize parameters for entire workflow
- * Complete a case study to build a full machine learning pipeline that
- * prepares data and creates a model for a dataset

MODULE 9

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 join@nestsoft.com

 www.nestsoft.com

- * Experiment Design
- * Understand how to set up an experiment, and the ideas associated with experiments vs. observational studies
- * Defining control and test conditions
- * Choosing control and testing groups

MODULE 10

- * Statistical Concerns of Experimentation
- * Applications of statistics in the real world
- * Establishing key metrics
- * SMART experiments: Specific, Measurable, Actionable, Realistic, Timely


MODULE 11


- * A/B Testing
- * How it works and its limitations
- * Sources of Bias: Novelty and Recency Effects
- * Multiple Comparison Techniques (FDR, Bonferroni, Tukey)
- * Portfolio Exercise: Using a technical screener from Starbucks
- * to analyze the results of an experiment and write up your findings

MODULE 12

- * Introduction to Recommendation Engines
- * Distinguish between common techniques for creating recommendation engines including knowledge based, content based, and collaborative filtering based methods.

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 join@nestsoft.com

 www.nestsoft.com

- * Implement each of these techniques in python.
- * List business goals associated with recommendation engines,
- * and be able to recognize which of these goals are most easily met with existing
- * recommendation techniques.

MODULE 13

- * Matrix Factorization for Recommendations
- * Understand the pitfalls of traditional methods and pitfalls of measuring
- * the influence of recommendation engines under traditional regression
- * and classification techniques.
- * Create recommendation engines using matrix factorization and FunkSVD
- * Interpret the results of matrix factorization to better understand latent
- * features of customer data
- * Determine common pitfalls of recommendation engines like the cold start problem
- * and difficulties associated with usual tactics for assessing
- * the effectiveness of recommendation engines using usual techniques,
- * and potential solutions.

(Click on Course for more details)

Course: Data Science

Duration: 90 Hrs (Changeable) | Fees: Individual / Batch

- Thank You -

N.B: This syllabus is not final and can be customized as per requirements / updates.

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

+91 9895490866

+91 8301010866

join@nestsoft.com

www.nestsoft.com