fingerTips

Data Intelligence Solutions

BUILD YOUR CAREER IN
EMERGING TECHNOLOGIES WITH

DATA SCIENCE PRO PROGRAM

ONLINE | INSTRUCTOR LEAD | CLASSROOM

ABOUT THE PROGRAM

Digital Marketing is the new age term and has become popular among marketers. The global market size of digital marketing has also been increased by 12.8% recently which has opened the new scope for youngsters to develop their careers in DM.

As the use of the internet has become very common nowadays and a big population can find busy doing on the internet. Now, It has become very difficult to promote the business in a conventional method. Digital Marketing uses internet-based tools to reach the maximum audience in a short duration.

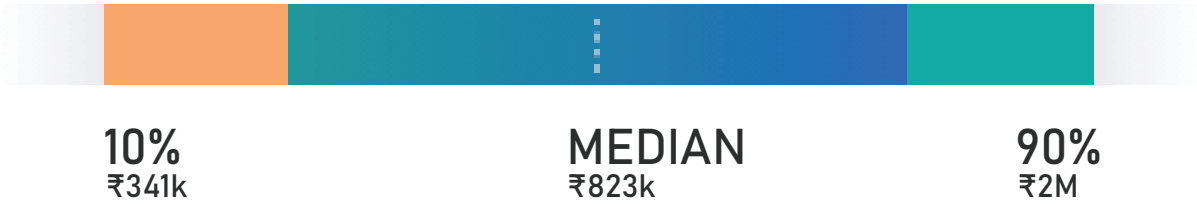
Why Data Science?

We often hear that "Information is Power" which comes from valid and reliable Data. If somebody has a good amount of data it can be converted into useful information and will ultimately help in solid decision making for Business. It is not possible for any business to survive without smart use of Data today. And it has made Data Science demanding which transforms the digital data for critical decision making.

DATA SCIENCE SALARY TRENDS

₹ 822,722 / year

Avg. Base Salary (INR)



Source: PayScale

DATA SCIENCE POSITIONS

- Data Science Exper
- Data Scientist
- Data Analyst
- Data Engineer
- Data Science Consultant
- Data Mining Expert

DATA SCIENCE TRENDS

JP Morgan

The success of the Finance giant has a huge role in Data Science and JP Morgan is known for its innovative data-driven solutions worldwide that have helped financial organisations resolve critical issues and improve their work efficiency.

Glassdoor

According to Glassdoor, the national average salary for a Data Scientist in India is 10,46,933. This is above the national average of 430333 and Opportunity to work with global teams, and chance of travel.

LinkedIn

As per LinkedIn Data Science jobs have witnessed nearly 37% growth over the last three years. In India, the data science market is pegged at $11 billion-which is anticipated to hit $326 billion by 2025

Nasscom

NASSCOM highlights around 1.4 lakh jobs remain vacant in the Artificial Intelligence (AI) and Big Data Analytics out of the total demand of 5.1 Lakh employees in the country.

PROGRAM HIGHLIGHTS

270+
Hours Learning

Quality
Handbooks

Specialist
Faculties

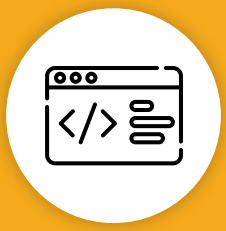
Real World
Case Studies

24 x 7
Help Desk

Customized
Curriculum

Practice on
Live Projects

Regular
Assessment



Trainees are trained thoroughly in required tools for Data Science Experts

Exposure of real world case studies, projects, assignments

The practical learning focused training follow customized curriculum

You will be specially trained for capstone projects and hackathon

WHO IS THIS PROGRAM FOR

Graduates Beginners in Data Science Social Science Graduates

Management Graduates Marketing and Sales Person Research Aspirants

Business Analyst Professionals

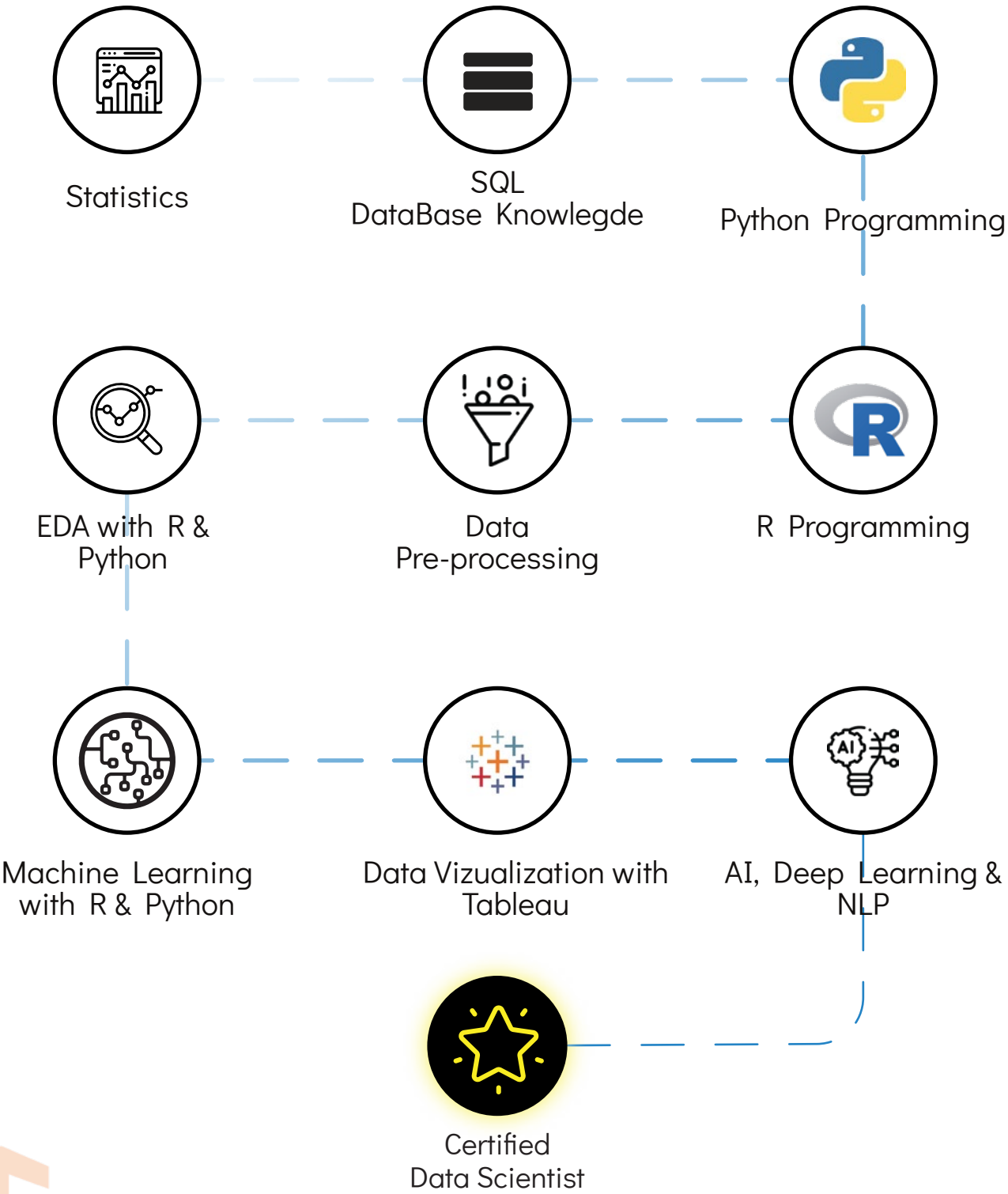
COMPANIES HIRING

airtel amazon UBER wipro

HSBC Infosys Jio EY Building a better working world

ICICI Bank

LEARNING PATH



Statistics Essentials & Fundamental of **Data Science**

Live & Interactive

Understanding Data & Data Science

- Introduction to Data & Data Types
- Numerical parameters to represent data
- Data Science v/s Data Analytics v/s Business Intelligence
- Importance of Data Science in today's data-driven world, application of Data Science
- Role of Data Scientist
- Introduction to Databases and its Types
- Steps of Data Science & Machine Learning
- Use cases of Data Science in different industries

Statistics Fundamentals

- Introduction to Statistics
- Descriptive v/s Inferential Statistics
- Variables and Types of Variables
- Measure of Center and Measure of Spread
- Measures of Central Tendency
- Measures of Dispersion
- Mean, Mode, Median
- Range, Standard Deviation, Variance,Quartile,IQR
- Covariance and Correlation between data
- Create and learn about Histogram

Advanced Statistics

- Introduction to Inferential Statistics
- Sample v/s Poplulation
- Explore Hypothesis Testing
- "Null and Alternative hypotheses
- Type I error vs Type II error
- Establishing a rejection region and a significance level
- What is the p-value and why is it one of the most useful tools for statisticians
- Learning about T-test
- One Sample, two Sample T-test
- In Depth Knowledge about Anova, One Way Annova and Two way Annova
- Chi-square Analysis
- Parametric and Non-parametric tests

Probability

- Introduction to probability
- Why probability
- Simple Probabilty
- Addition Rule, Union, Intersection
- Bayes Theorem
- Bernoli's Theorem
- Independent & Dependent Events
- Conditional Probability
- Probability Distributions
- "Uniform Distribution"
- "Normal Distribution"
- What is Central Limit Theorem
- Skewness & Kurtosis
- Sampling and different sampling techniques
- What is Outlier and it's importance

Introduction to Database

- What is Database
- Types of Databases-
  - Relational Database,
  - Object-Oriented Database,
  - Distributed Database,
  - NoSQL Database,
  - Graph Database,
  - Cloud Database,
  - Centralization Database,
  - Operational Database
- Database Components

Introduction to SQL

- Introduction to Structured Query Language
- Different types of databases
- What is RDBMS-Relational Database Management System
- Data types and functions
- Creating Databases and Tables

SQL Operators with Syntax

- Introduction to SQL Operators
- Types of SQL Operators
  - SQL Arithmetic operators,
  - SQL Comparison operators,
  - SQL Logical operators,
  - Compound operators,
  - SQL Unary Operator

Working with SQL: Join, Tables, and Variables

- Creating Databases and Tables
- Explore Entities and Relationships
- DDL & DML Statement
- Select Statement, Aggregate Functions
- Insert into, Where, Order By, Distinct, Group By, Like, In, Between Operators,
- Limit Aliases, and & or Clause
- Update & Delete Query
- SQL Joins-What are Joins, Inner Join, Left Join, Right Join, Full Join
- Multiple Joins-Joining More than two tables

SQL Views, Functions, and Stored Procedures

- Introduction to subqueries in sql and apploications
- How to write Subqueries in SQL
- Methods to create and view subqueries
- Subqueries with INSERT statement
- Subqueries with UPDATE statement
- Subqueries with DELETE statement

Advance Sql

- Understanding of more Sql Functions
- Learning about Sorting
- Grouping Data together
- Developing skill to Filter
- Explore More about Subqueries
- Primary Key, Foreign Key constraints
- Unique key, Null constraints

Data Science with **Python**

Live & Interactive

Overview of Data Science using Python

- Introduction to Python programming language
- How Python is used for Data Science applications
- Industeries working with Python
- Applications of Python in diffreent sectors
- Features of Python and how is Python different from other programming languages

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Python Enviornment set up and Essentials

- Python installation and set up
- Python IDE working mechanism
- Running some Python basic commands
- Python variables, data types and keywords
- Libraries and Modules in Python

Basic Python Construct

- How to use indentation like tabs and space
- Built in data types in Python
- Number, Strings, List, Tupple, Set, Dictionaries
- Basic Operators and Functions
- Conditional and Control Statementslike if,else, break, continue, Loops in Python-For, While and more
- Lambda expression

NumPy for Mathematical Computing

- Introduction to Numpy
- What are arrays and matrices, array indexing, array math, Inspecting a NumPy array, NumPy array manipulation
- Basic Numpy operations
- Using Arithmetic Operators with Numpy
- Using Numpy with Conditional Expressions
- Arithmetic Operators with Numpy 2D Arrays
- Arithmetic Functions in Numpy
- Logical Operators in Numpy

Data Manipulation with Pandas

- Introduction to Pandas
- Basic Functionalities of series and Data Frames
- Transforming Data-sorting rows and columns
- Slicing and Dicing Functions
- Missing Value Handling

Data Vizualization with Matplotlib and Seaborn

- Introduction to Data Visualization
- Introduction to Matplotlib
- Using Matplotlib for Plotting Graphs

Introduction to Machine Learning

- Introduction to Machine Learning
- Use Cases of Machine Learning
- Types of Machine Learning
- Machine Learning Modelling Flow
- What is Supervised v/s Unsupervised Learning?
- What is Reinforcement Learning?
- Challenges of ML

Linear Regression

- Use cases of Linear Regression
- Understanding Simple Linear Regression
- What is Multiple Linear Regression?
- Learning about Lasso Regression
- Learning about Ridge Regression
- Measuring Performance Metrics

Supervised Learning

- Introduction to Supervised Learning
- Supervised Learning- Real-life Scenario
- Supervised Learning Flow
- Types of Supervisied Algorithms
- What is Logistics Regression?
- Linear Regression Vs Logistic Regression
- Understanding Logistic Regression
- What is Decision Tree?
- Decision Tree Formation
- Overfitting of Decision Trees
- Information Gain
- Gini Index

Unsupervised Learning

- Introduction to Unsupervised Learning
- Unsupervised Learning- Real-life Scenario
- Unsupervised Learning Flow
- Types of Unsupervisied Algorithms
- What is Clustering?
- Learning about K-means Clustering
- Optimal Number of Clusters
- Understanding Hierarchical Clustering
- Hierarchical Clustering Example
- Accuracy Metrics

Feature Engineering

- Factor Analysis
- Factor Analysis
- Feature Encoding
- Feature Scaling
- Feature Selection
- Outlier Treatment

Ensemble Learning

- Understand Ensemble Learning
- Esemble Learning - Real-life Scenario
- Esemble Learning Flow
- Types of Esemble Learning Algorithm
- Understanding about Random Forest
- Math Behind Random Forest
  Bagging & Boosting
- Learn about Ada Boost
- Adaboost Algorithm
- Gradient Boosting
- Xg Boost
- Model Selection
- Common Splitting Strategies

Dimensionality Reduction

- Understanding Dimensionality Reduction
- Why is Dimensionality Reduction required?
- Factor Analysis
- Factor Analysis
- First Principal Component
- Eigenvalues and PCA
- Practice: PCA Transformation
- Exploratory Factor Analysis

Data Science with **R**

Live & Interactive

Introduction to R

- Setting up R Environment
- Data Types With R
- Operators and Functions
- In Depth Knowlegde about R Syntax

Data Manipulation and Cleaning

- Data Loading
- Selecting Data
- What are Filters?
- Why and How to Group Data?
- Arrange Data
- Learn to Merge Data
- Chaining & Pipeline
- Efficiently Handing Missing Values
- Replacing Values
- Manipulating Data
- Indexing a Dataframe
- Concatenate the Dataframes

Data Visualizaiton

- Introduction to Visualization
- Learn about Exploratory data analysis
- Explore Different Graphs
- Develop Advance Ggplot2 Library Skills

Hypothesis Testing

- What is Hypothesis Testing
- Why Hypothesis Testing
- Parameter and Statistic
- Sampling Distribution
- Standard Error
- Statistical Inference
- 1 Sample t -test
- 2 Sample T- Test
- Annova
- Chi- Square

Supervisied Learning

- Implementing Simple Linear Regression
- Implementing Multiple Linear Regression
- Introduction to Supervised Learning
- Supervised Learning- Real-life Scenario
- Supervised Learning Flow
- Types of Supervisied Algorithms
- What is Logistics Regression?
- Understanding Logistic Regression
- What is Decision Tree?
- Decision Tree Formation
- Understanding K Nearest Neighbour
- Learning about Support Vector Machine
- Learning about Naive Bayes
- Accuracy Metrics
- Confusion Matrix
- Cost Matrix

Unsupervisied Learning

- Introduction to Unsupervised Learning
- Unsupervised Learning- Real-life Scenario
- Unsupervised Learning Flow
- Types of Unsupervisied Algorithms
- What is Clustering?
- Learning about K-means Clustering
- Understanding Hierarchical Clustering
- What is PCA Technique?
- Accuracy Metrics

Working with **Tableau**

Live & Interactive

Introduction to Tableau

- Installing Tableau
- Tableau desktop vs Tableau Public
- User Interface of Tableau Public
- Data Preparation

Connecting different sources

- Connecting to Various DataSource
- Connection to Text File
- Connection to Excel File
- Connection to Database1

Working with Metadata

- Working with Metadata
- Data types
- Rename, Hide, Unhide and Sort Columns
- Default Properties of fields
- Dealing with NULL values

Join Data

- What are Joins?
- Relationships vs Joins
- Create a Join
- Join types
- Inner Join
- Left Join
- Right Join
- Full Join
- Union Join
- Join Clauses
- Null Values in Join Keys
- Cross-Database Joins

Data Blending

- What are Blends
- Steps for Blending
- Understand Primary and Secondary Data Sources
- Work Across Blended Data Sources
- Define Blend Relationships for Blending
- Establish a Link
- Multiple Links
- Differences between Joins and Blending
- Differences between Relationships and Blending
- Blending Limitations

Filters

- Types of filters
- Dimension Filter
- Date Filter
- Measure Filter
- Visual Filter
- Interactive Filter
- Data source Filter
- Context Filter

Charts and Graph

- Creating Charts in Tableau
- Bar Chart
- Stacked Bar Chart
- Line Chart
- Scatter Plot
- Histogram
- Dual-Axis Charts
- Combined-Axis Chart
- Funnel Chart
- Cross Tabs
- Highlight Tables
- Maps

Advance Charts

- Box and Whisker's Plot
- Bullet Chart
- Bar in Bar Chart
- Gantt Chart
- Waterfall Chart
- Pareto Chart
- Control Chart
- Funnel Chart
- Bump Chart
- Step and Jump Lines
- Word Cloud
- Donut Chart

Level of Detail Expression

- LOD expressions and including concept
- Expressions Syntax
- Aggregation and replication with LOD expressions
- Nested LOD expression
- SVM
- Naive Bayes
- K-Means Clustering
- Feature Selection

Working with Dashboards

- Introduction to Dashboards
- Building a Dashboard
- Dashboard Layouts and Formatting
- Interactive Dashboards with actions
- Designing Dashboards for devices
- Story Points

Welcome to world of NoSql and Mongo DB

- Types of Databases
- Challenges of Rdbms,
- Non Relational Database & Its Significance
- Benefit Over Rdbms
- Non Relational Database and Big Data
- Types of Non Relational Database
- Introduction to Mongodb
- Mongodb Installation
- Indepth knowledge about MongoDB Data Types
- Understanding Crud Operations in Mongodb
- Finding Elements
- Deleting Elements
- Updating Elements
- Projection
- Arrays

CRUD and Basic Operations

- Understanding Databases, Collections & Documents
- Creating Databases & Collections
- Understanding JSON Data
- Understanding BSON Data
- Json Vs Bson

Schema, Modeling and Relations

- What Is Schema?
- Structuring Documents
- Data Types
- Concepts of Data Modelling
- Why Use Datamodel
- Types of Data Models
- Challenges for Data Modeling in Mongodb
- Model Relationships
- Model Tree Structures
- Model Specific Application Contexts

Indexing and Aggregation Framework

- Index Introduction,
- Index Concepts
- Index Types
- Index Properties
- Index Creation
- Indexing Reference

- Introduction to Aggregation
- Approach to Aggregation
- Types of Aggregation
- Aggregation Pipeline
- Performance Tuning.

Replication & Shrading

- Replication
- Why Replication
- How Replication Works
- Automatic Failover
- How to Setup Replication
- Sharding

- Sharded Cluster
- Query Router
- Hashed Sharding
- Ranged Sharding

Data Management and Administration

- Administration concepts in MongoDB
- Monitoring issues related to Database
- Monitoring at Server, Database, Collection level
- Database Profiling
- Memory Usage
- No of connections

- Page fault
- Backup and Recovery Methods
- Export and Import of Data to
- Run time configuration of MongoDB

MongoDB Security

- Understanding Role Based Access Control
- Creating a User
- Built-in Roles
- Assigning Roles to Users & Databases
- Updating & Extending Roles to Other Databases
- Mongodb Integration With Java

Working with **AI and Deep Learning**

Self-Paced

Introduction to AI and Deep learning

- What is AI and Deep learning
- History of Deep Learning
- Machine Learning vs Deep Learning
- how deep learning is different from all other machine learning methods
- Real Life Applications of Deep Learning
- The benefits of machine learning
- Challenges of Deep learning
- Latest Breakthrough in Deep Learning
- General Flow of Deep Learning Projects

Introduction to Tensorflow

- Introduction to TensorFlow
- Tensorflow Hello World
- Linear Regression With Tensorflow
- Logistic Regression With Tensorflow
- Intro to Deep Learning
- Deep Neural Networks

Artificial Neural network

Biological Neuron
Perceptron
Multi Layer Perceptron
Weight and Bias
Activation function
Deep Neural Networks

Convolution Neural Network

What are convolutional neural networks?
CNN for Classifications
CNN Architecture
Understanding Convolutions
Famous CNN Architectures
Using CNN with different Datasets
Transfer Learning

Recurrent Neural Networks

Recurrent Neural Network (RNN)
Architecture of RNN
Different Types of RNNs
Bidirectional RNN
Applications of RNN
Using RNN with different Datasets

Understanding Web Scraping

- What is Web Scraping?
- Origin of Web Scraping
- Web Crawling vs Web Scraping
- Uses of Web Scraping
- Components of a Web Scraper
- Working of a Web Scraper
- Why Python for Web Scraping?
- Important Python Libraries for web scraping

Path Towards building web scraper

- Setting up Python Environment for Web Scraping
- Python Modules for Web Scraping
- Requests
- Urllib3
- Selenium
- Scrapy
- Extract data using Beautiful Soup
- Full Table Scraping
- Row Scraping
- Header Scraping

Understanding NLP

- Introduction to NLP
- Introduction to Text Mining
- What is NLP?
- Typical NLP Tasks
- Natural Language Toolkit (NLTK) Environment

Working with NLP

- Understanding text data
- Tokenizers
- Tokenization
- Stemming
- Lemmatization
- Stop Words
- Spell Correction
- Normalizing Text
- Extracting Features from Text
- Bag-of-Words(BoW), TF-IDF
- Similarity score - Cosine similarity
- Naïve Bayes Classifier

Processing Data

- Data Type Conversions
- Filtering
- Sorting
- Cleaning

Visualization

- Introduction to Data Visualization
- Trying different Basic Data Visualization
- Advance Data Visualization
- Taking insights from Data

GUIDED PROJECTS

FingerTips Data Science Pro Program provides you an environment where trainees are trained with practice in live situations. We provide a series of Data Science projects developed by experienced Data Scientists. Trainees undertake the projects under the guidance of instructors. These projects provide good opportunities to practice in real situations. Apart from projects, learners also practice on real world case studies, capstones projects, big data assignments etc. to get familiarity with every business problem and complexity.

WALMART SALES ANALYSIS

With the help of MySQL understand and handle the Big Mart Sales Data. Become a real time data scientist with data wrangling and filtering as per industry scenarios.

CARDIAC ARREST DATA

Understand the role of Data science in healthcare industry by using Machine learning, data visualization and Data handling concepts to analysis Cardiac Arrest Data

BITCOIN PRICE PREDICTION

With the increase in demand of crypto-currency and Bitcoin work closely with Data Science concepts to predict the Bitcoin price

UBER DATA ANALYSIS

Work with Uber data and understand how Uber uses Data to analyze. Use Exploratory Data Analysis concepts along with various machine learning algorithms

GUIDED PROJECTS

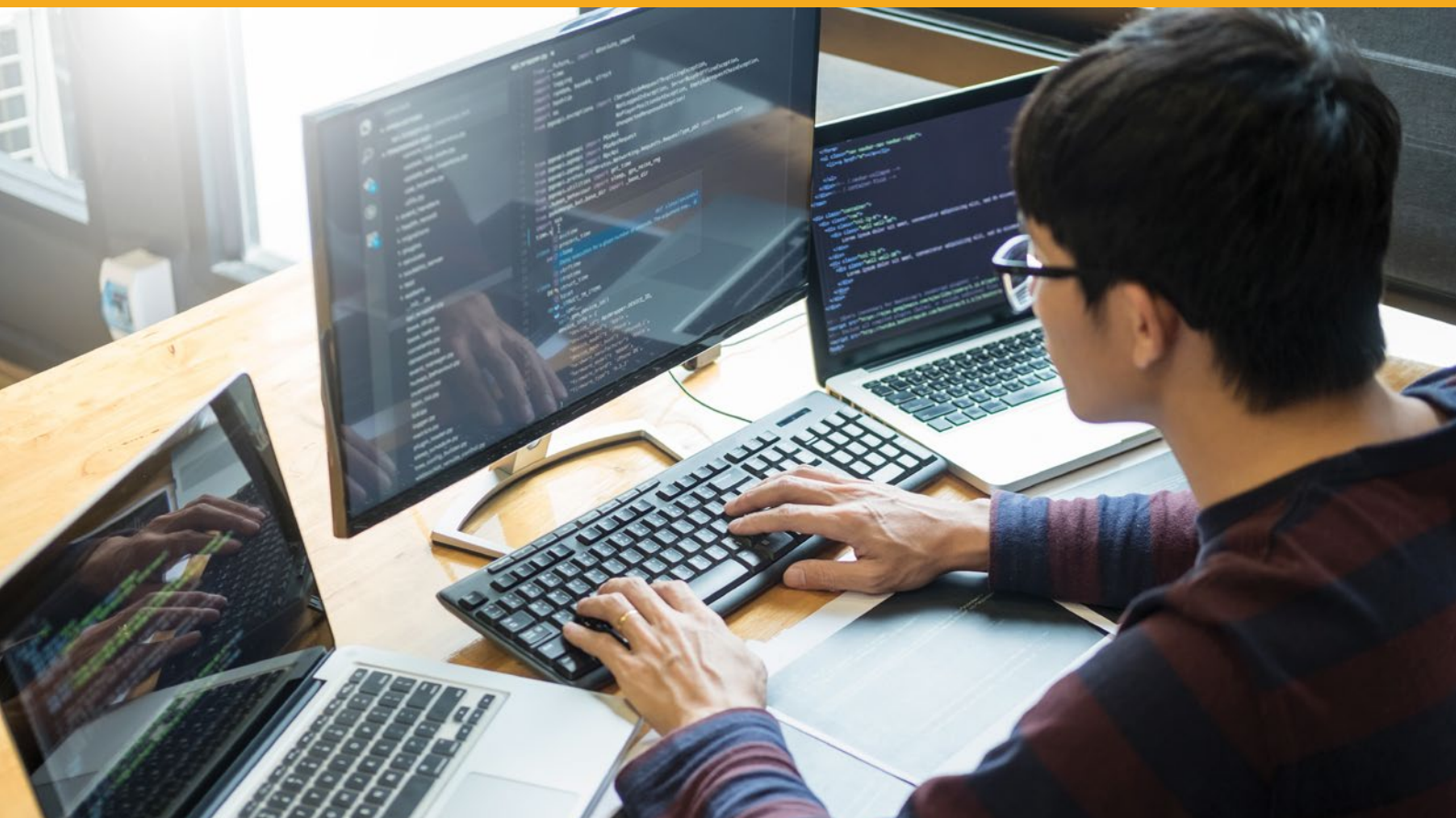
UNDERSTANDING GOOGLE TREND

Use the real life google trend data and explore the data to understand the current trends. Also Highlight and find out what trend people are following

CREDIT CARD FRAUD DETECTION

With the help of machine learning detect and prevent credit card fraud and handle the data to achieve maximum accuracy.

And More 18 +



TOOLS













CAREER ASSISTANCE

Our dedicated Career Support team starts working with our trainees from day one in facilitation of their placements. The main features of our career support are.

HR Rounds

Placement Support

Technical Rounds

Resume Building

PROGRAM CERTIFICATE

DATA SCIENCE PRO PROGRAM

Fingertips believe in the 360 degree development of our learners thro ugh rigorous training programme. Our Advance AI Master Programme focuses on making our learners successful through the highly demanding course. The course offers in-depth technical training, Industry Interactions, Hands on Practice to meet the desired needs of learners. The years of experienced team provide one to one support during training to understand and solve the complex problems of Artificial Intelligence and Machine Learning. Assurance of placement assistance at the end of course is one thing which makes us the most reliable company in this segment.

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Email us at : **info@fingertips.co.in**

Know More !!

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Data Intelligence Solutions