



# Data Science



# About Us

Learnify is the MSME and Startup India verified destination for professionals in product, growth, design, management, business, tech, and data. It provides curated, hands-on learning from industry experts to instantly enhance skills, foster innovation, and empower you within a global community.



# Our Vision & Mission

Learnify, MSME and Startup India verified, teaches millions technical skills with expert-led, hands-on courses for career growth.



## VISION

The vision of Learnify is to revolutionize education through the seamless integration of technology, creating a direct path from skill acquisition to job readiness.



## MISSION

Our mission is to provide personalized and engaging learning experiences for students of all ages by leveraging digital tools, virtual platforms, and data-driven insights to ensure effective skill mastery and career readiness.

# Data Science



## COURSE CURRICULUM

1.

### INTRODUCTION TO PYTHON

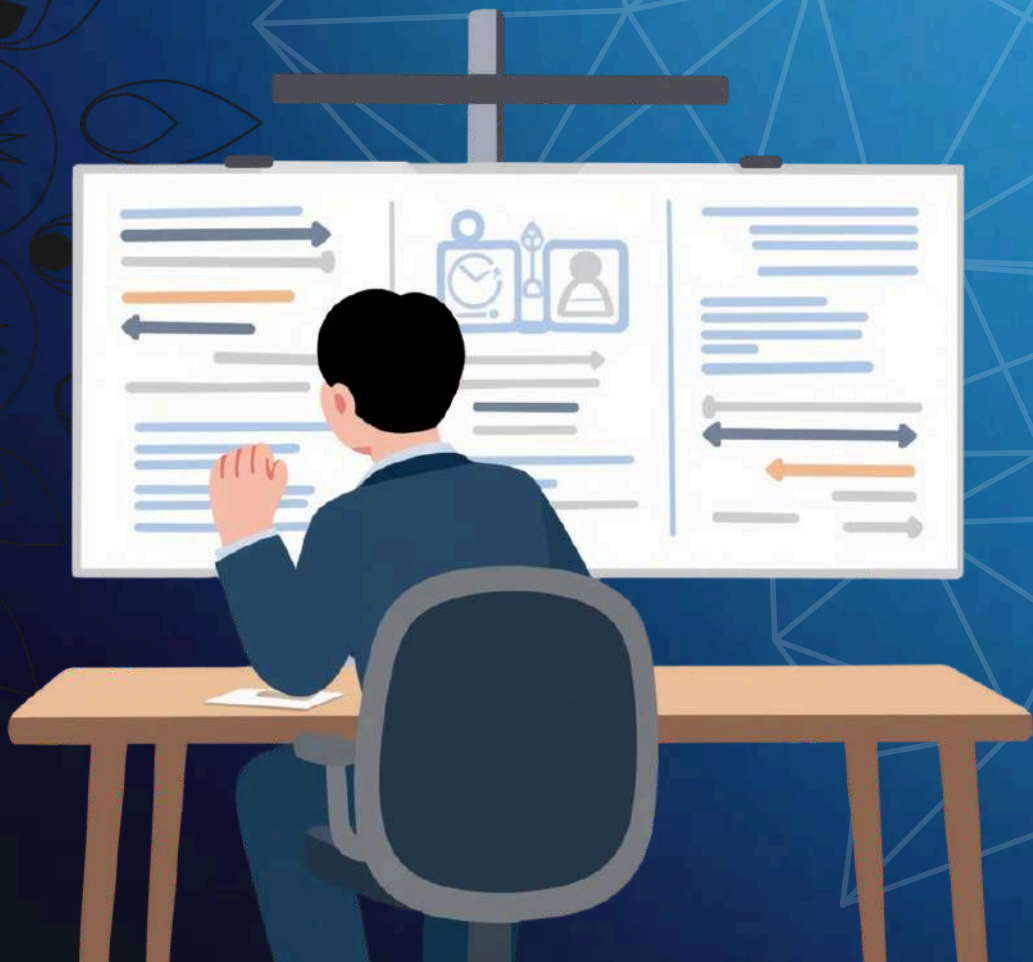
- What is Data Science? Applications and Career Paths
- Data Science Lifecycle and Real-World Use Cases
- Overview of AI, ML, and Data Analytics



## 2.

## PYTHON FOR DATA SCIENCE

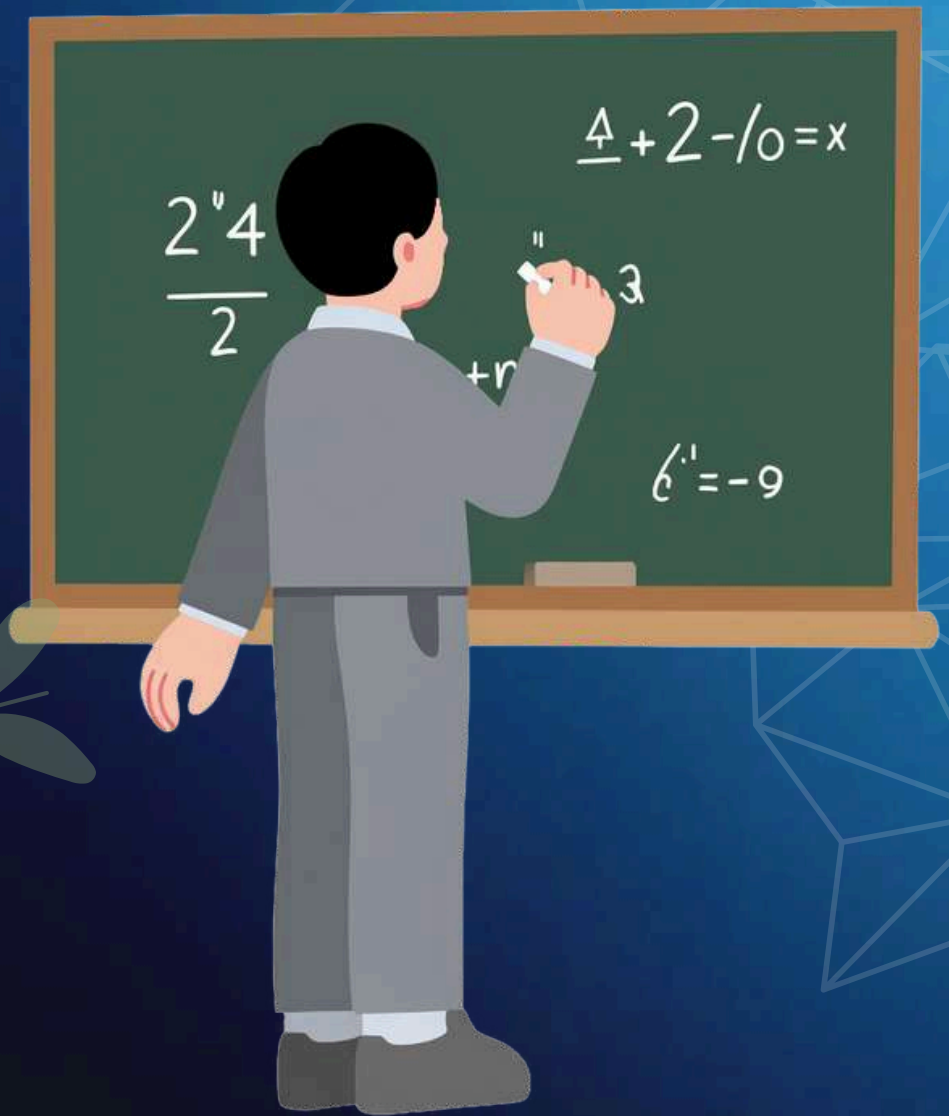
- **Python Basics: Variables, Data Types, Loops, Functions**
- **Working with Libraries: NumPy, Pandas, Matplotlib**
- **Hands-on: Data Manipulation & Visualization**



## 3.

### MATHEMATICS & STATISTICS FOR DATA SCIENCE

- Descriptive Statistics: Mean, Median, Mode, Variance
- Probability and Distributions
- Correlation, Regression & Hypothesis Testing
- Hands-on: Exploratory Data Analysis (EDA)



## 4.

## DATA VISUALIZATION

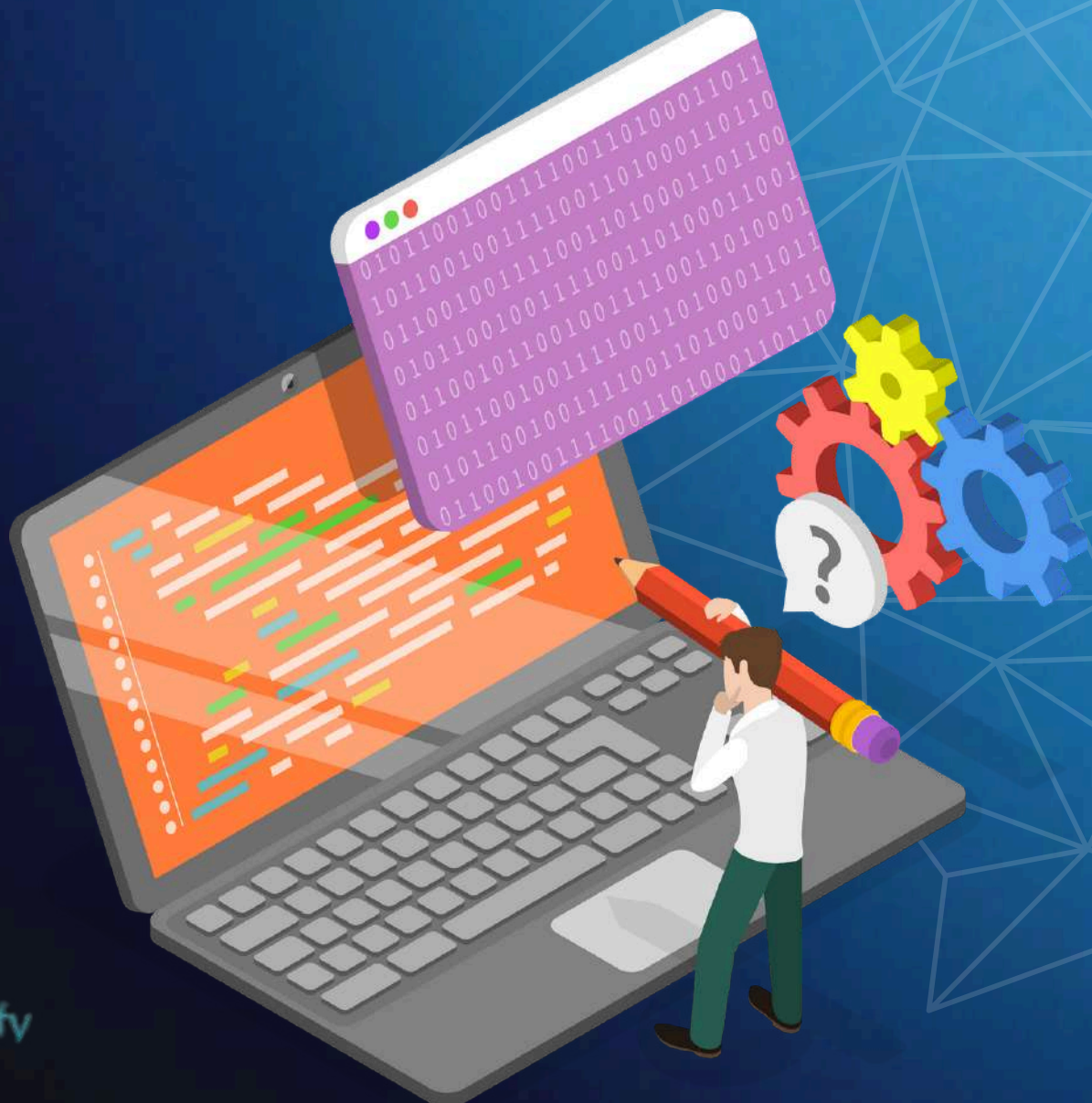
- Using Matplotlib, Seaborn & Plotly for Insights
- Building Dashboards with Power BI or Tableau
- Real-world Visualization Projects



## 5.

## MACHINE LEARNING & DATA ANALYTICS

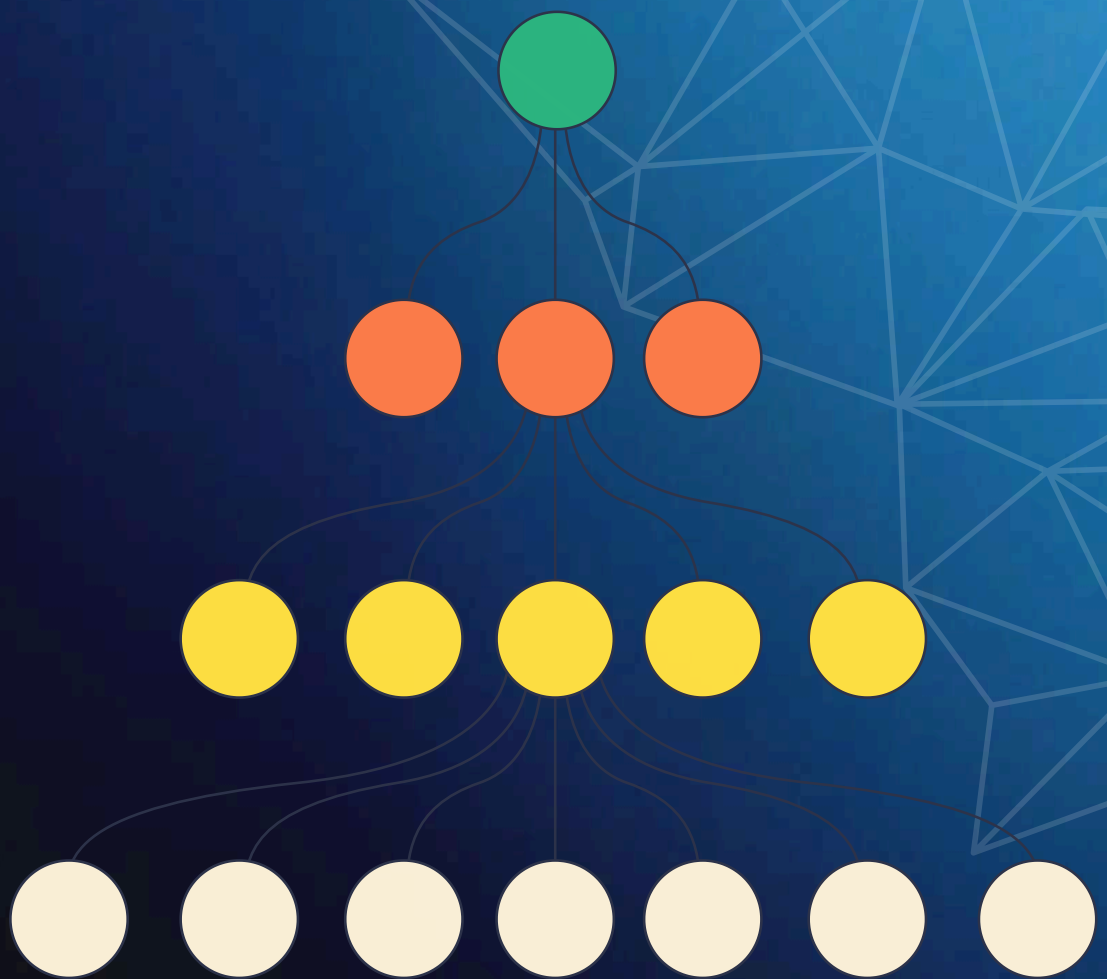
- Data Cleaning, Encoding, Normalization
- Handling Outliers and Missing Values
- Feature Selection & Dimensionality Reduction



## 6.

## SUPERVISED MACHINE LEARNING

- Linear & Logistic Regression
- Decision Trees, Random Forest, Gradient Boosting
- Model Evaluation Metrics & Cross Validation



## 7.

## UNSUPERVISED LEARNING

- Clustering (K-Means, Hierarchical)
- Dimensionality Reduction (PCA, t-SNE)
- Market Segmentation and Anomaly Detection



## 8.

## TIME SERIES ANALYSIS

- Time Series Components: Trend, Seasonality, Noise
- Forecasting with ARIMA, SARIMA, LSTM
- Real-world Forecasting Projects



## 9.

## SQL & DATABASE MANAGEMENT

- SQL Basics: SELECT, JOIN, GROUP BY
- Data Extraction, Transformation & Loading (ETL)
- Integrating SQL with Python for Analytics



## 10. DEEP LEARNING FOR DATA SCIENCE

- **Neural Network Fundamentals**
- **TensorFlow & Keras Basics**
- **Applications in Classification & Forecasting**

11.

## NATURAL LANGUAGE PROCESSING (NLP)

- Text Preprocessing and Sentiment Analysis
- Named Entity Recognition (NER)
- Topic Modeling and Text Classification



## 12. BIG DATA & CLOUD ANALYTICS

- Introduction to Big Data (Hadoop, Spark)
- Cloud Platforms: AWS, GCP, Azure for Data Science
- Scalable Machine Learning with Cloud Services

## 13. CAPSTONE PROJECTS (ADVANCED LEVEL)

- E-commerce Recommendation System
- Credit Risk Modeling
- Sentiment Analysis on Social Media Data
- Healthcare Data Analysis
- Sales Forecasting Model
- Customer Churn Prediction



## 14. RESUME BUILDING & PROFILE OPTIMIZATION

- Crafting an ATS-friendly resume tailored to tech roles
- Optimizing LinkedIn & GitHub profiles
- Writing impactful career objectives and summaries



## 15. APTITUDE & LOGICAL REASONING

- Quantitative Aptitude: Speed, Accuracy & Problem Solving
- Logical Reasoning: Puzzles, Patterns & Data Interpretation
- Mock Tests and Time Management Strategies



16.

## COMMUNICATION & SOFT SKILLS

- **Verbal Communication: Public Speaking & Presentation Skills**
- **Email Etiquette and Business Communication**
- **Teamwork, Leadership, and Professional Behavior**



17.

## TECHNICAL INTERVIEW TRAINING

- Core DS Interview Concepts & Q&A Practice
- Hands-on Coding Interview Sessions (Python & Data Structures)
- Whiteboard Problem Solving & Project Discussion Tips



## 18. HR & BEHAVIORAL INTERVIEW PREPARATION

- Understanding HR Questions & Framing STAR-Method
- Answers Mock HR Interviews with Personalized Feedback
- Building Confidence and Positive Body Language



19.

## INTERNSHIP & JOB ASSISTANCE

- Access to Learnify's Hiring Partner Network
- Internship Opportunities with EdTech & AI Startups
- Job Alerts, Career Counseling & Placement Support



20.

## CERTIFICATION & CAREER SUPPORT

- Learnify Certificate of Completion
- MSME & Startup India Certification
- Resume Building & LinkedIn Optimization



Data Science

# Our Alumni Work At



**Data Science**

# Contact Us



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