

# Data Science and ML for Beginners Bootcamp 2025

# Learn, Build, and Launch Your Data Science Journey

**Enroll Now | Limited Seats Available!** 

## Why Switch to Data Science and Machine Learning?

- Data is the new currency: Harnessing its potential is a highly sought-after skill.
- Data Science & ML: Empower professionals to make data-driven decisions that transform industries.
- High Demand: Expertise is needed across healthcare, finance, technology, and entertainment.
- Limitless Applications: Predicting behavior, optimizing supply chains, diagnosing diseases, and more.
- Career Benefits: Competitive salaries, job security, and opportunities for continuous learning.
- Perfect Time to Transition: Tools are more accessible, making now the ideal time to switch to this impactful field.

## Why Join?

- Hands-on Learning with Real-World Projects
- Expert Instructors from Industry and Academia
- Comprehensive Curriculum Designed for Career Growth
- Interactive Learning Experience
- Stay Ahead in a Competitive Market
- Certifications and Recognition

Wrangling data is like interrogating a prisoner. Just because you wrangled a confession doesn't mean you wrangled the answer." — Brad Schneider

# Curriculum Overview

### Module 1: Basics of Python

### Introduction to Python:

- Installing Python and Jupyter Notebook
- Python syntax, variables, and data types

### **Control Structures:**

- If-else conditions
- Loops (for, while)

### **Functions and Modules:**

- Defining and calling functions
- Using built-in libraries
- Data Structures:
- Lists, tuples, dictionaries, and sets

### Hands-On:

- Write programs for basic computations and tasks.
- Mini-Project: Automate a daily task (e.g., calculate monthly expenses)

# Module 2: Python for Data Science and Visualization

### Data Manipulation:

- Introduction to Data Science Tools:
- Numpy: Arrays and basic computations
- Pandas: Dataframes and data wrangling

### Data Visualization:

- Matplotlib: Line, bar, scatter plots
- Seaborn: Advanced visualization (heatmaps, pairplots)

### Working with Real-World Data:

- Loading and cleaning datasets
- Handling missing data

### **Capstone Project:**

• Perform data cleaning and create visualizations for a realworld dataset (e.g., sales or weather data).

# Curriculum Overview

### Module 3: Introduction to Statistics

### **Descriptive Statistics:**

- Measures of central tendency (mean, median, mode)
- Measures of variability (standard deviation, variance)

### **Probability Basics:**

- Probability distributions (normal, binomial)
- Introduction to hypothesis testing

### **Correlation and Regression:**

- Understanding relationships between variables
- Basics of linear regression
- Simplified introduction to null hypothesis and p-values

### **Capstone Project:**

• Analyze the relationship between two variables in a dataset. (e.g., sales vs. marketing spend)

### Module 4: Machine Learning

### **Topics Covered:**

- Introduction to Machine Learning:
- Supervised vs. unsupervised learning
- Key ML algorithms (linear regression, decision trees, kmeans)

### **Building Models with Scikit-Learn:**

- Splitting data into training and testing sets
- Fitting a model and evaluating performance

### Hands-On ML:

• Train a simple model (e.g., predict housing prices using a dataset)

### **Capstone Project:**

- Develop a basic ML model to solve a real-world problem.
- Predict housing prices or customer churn using historical data.

# Curriculum Overview

### Bonus Module: Career Advice Session

- Career Roadmap: Roles in Data Science, ML, and AI.
- Portfolio Building: Showcase projects on GitHub and Kaggle.
- Q&A with Experts: Tips on upskilling and industry tools.

### What Makes This Bootcamp Unique?

- Hands-On Learning: Real-world projects every day.
- Beginner-Friendly: No prior experience needed.
- Industry Tools: Python, NumPy, Pandas, Scikit-Learn, Matplotlib, and Seaborn.
- Career Focused: Build a portfolio and gain insights into industry trends.

### Who Should Attend?

- Students exploring Data Science/AI careers.
- Professionals switching to analytics.
- Beginners curious about data science.

# **Meet the Instructors**



### Vinay Kumar

Co-Founder @ Banex/ Data Science & AI Expert

With over 15 years of expertise in data science, AI, ML, and Cloud, he has led datadriven transformation projects for Fortune 500 clients at EY, HP, Wipro, and TCS, fueling growth and innovation.



### Naveen K

Principal Consultant @ Banex

Brings deep experience in data science, machine learning, and predictive analytics. Delivered value across multiple domains like finance, and healthcare, and helped organizations leverage advanced analytics.

## Learn from the Best in the Industry

# Schedule & Pricing

# **Special Early Bird Discount**



# £350

# Only Available Till 25th December

Enroll Now | Limited Seats Available!

Enrollment Closes On: 5th January 2025



# What Are You Waiting For?

Take Your Career to The Next Level Now

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