



DATA SCIENCE

Data Science is a marathon,
not a sprint — keep learning!



Data Science

Data science is the practice of using data to find patterns, gain insights, and make better decisions with the help of **statistics**, **programming**, and **machine learning**.



Miles To Go in Data Science

The pathway to becoming a data scientist is defined by a **series of stages and competencies.**



Milestone

Foundations

- Understanding **Data Science**.
- Learn basic **Math & Statistics** (probability, averages, hypothesis testing).
- Start with **Python & SQL** basics.

2nd Milestone

Data Handling & Visualization

- **Data cleaning & wrangling** (Pandas, NumPy)
- **Exploratory Data Analysis (EDA)**
- **Data visualization** (Matplotlib, Seaborn, Power BI / Tableau)

3rd Milestone

Machine Learning

- **Supervised Learning** (Regression, Classification) and **Unsupervised Learning** (Clustering, Dimensionality Reduction).
- **Model evaluation & improvement** (accuracy, precision, recall, F1-score)



Milestone

Advanced & Real-World Applications

- **Deep Learning** (Neural Networks, TensorFlow/PyTorch)
- **Specializations** (NLP, Computer Vision, Time Series, Recommendation Systems)
- **Deployment** (Flask, Streamlit, Cloud)
- **End-to-End Projects & Portfolio**



Data Science Retrospective

Deep Learning

Deployment

Data Manipulation

Machine Learning

Data Visualization

Advanced Python

Stats & Probability

Basic Python

Your guide to becoming a Data Scientist