

■ Python to AI Roadmap (12 Months)

■ Month 1: Python Basics

- Variables, data types, conditions, loops
- Functions, OOP, file handling
- Mini projects: Calculator, To-do app

■ Month 2: Data Handling in Python

- NumPy, Pandas
- Matplotlib, Seaborn
- Project: Student marks analysis

■ Month 3: Math for AI

- Linear Algebra, Probability, Statistics
- Project: Simulate dice & probability

■ Months 4–5: Machine Learning

- Scikit-learn
- Supervised & Unsupervised learning
- Projects: House price prediction, Spam detection

■ Months 6–7: Deep Learning

- TensorFlow / PyTorch
- CNN, RNN, LSTM
- Projects: Handwritten digit recognition, Image classifier (cats vs dogs)

■ Months 8–10: Specialization

- Computer Vision (OpenCV, YOLO)
- NLP (NLTK, Transformers)
- Project: Chatbot / Object detection

■ Months 11–12: Deployment & Real-World AI

- Flask / FastAPI
- Streamlit / Gradio
- Cloud basics (AWS/GCP)
- Capstone Project: AI Web App

■ Tips:

1. ■■■■ 2–3 ■■■■ practice ■■■■
2. ■■■■■ theory ■■ ■■■■ → projects ■■■■■
3. GitHub ■■ ■■■■ code ■■■■■
4. Kaggle ■■ dataset ■■■■ practice ■■■■
5. English improve ■■■ → documentation ■■■■■ ■■■ ■■■ ■■■■■■