

## 6-Month End-to-End Python Course with AI & Projects

Welcome to GaurCoder's comprehensive program designed to transform aspiring developers into Al-powered Python experts.

### YOUR JOURNEY AHEAD

# From Zero to Al Hero: Your 6-Month Roadmap

01

### Month 1-2

Master Python Foundations

Build a rock-solid coding base.

03

### Month 4-5

Dive into AI & ML

Unleash the power of intelligent systems.

### Month 3

Develop Real-World Apps

Bring your code to life with GUIs and web.

## Month 6

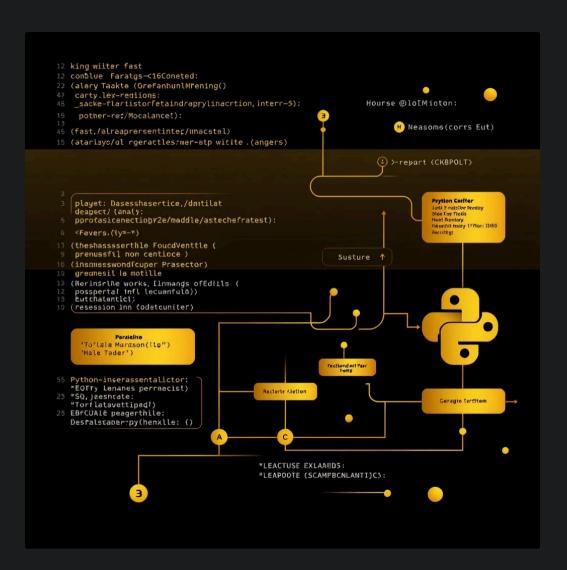
Build Your Al Portfolio

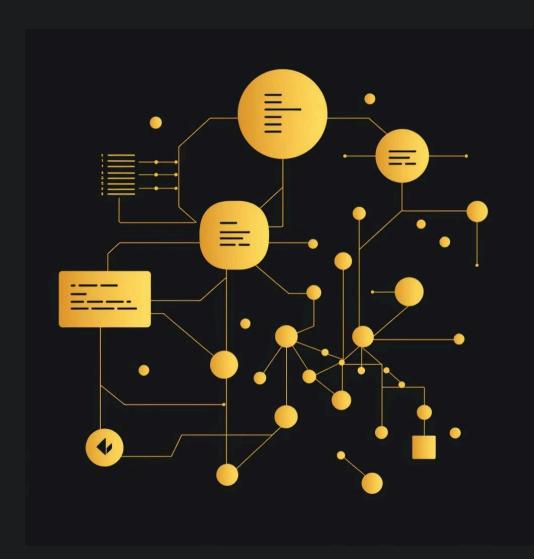
Showcase your skills with capstone projects.

### Month 1:

## Python Foundations

- **Learning Goals:** Grasp core Python syntax, control flow, and functions.
- Topics Covered: Basics of Python (syntax, variables, operators, control flow), Functions & Modules.
- Key Python Libraries: Standard Library.
- Mini Project: Build a fully functional Calculator App or a Guess the Number Game.





#### Month 2:

### Data Structures & OOP

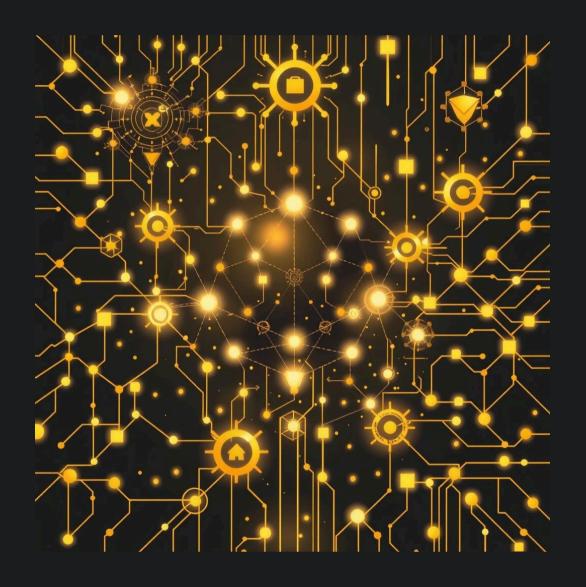
- Learning Goals: Master essential data structures and object-oriented principles.
- Topics Covered: Lists, Tuples, Sets, Dictionaries, String Manipulation, File Handling (JSON, CSV), Object-Oriented Programming (classes, inheritance, encapsulation).
- **Key Python Libraries:** Collections, JSON, CSV.
- **Mini Project:** Develop a Student Management System or a Contact Book application.

### Month 3:

# App Development with Python

- **Learning Goals:** Create interactive GUI and web applications.
- **Topics Covered:** Tkinter/PyQt (GUI apps), Flask Basics (Web apps, APIs), Database (SQLite/MySQL) integration.
- **Key Python Libraries:** Tkinter/PyQt, Flask, SQLAlchemy.
- Mini Project: Build a To-Do List App or a simple Blog Web App.





#### Month 4:

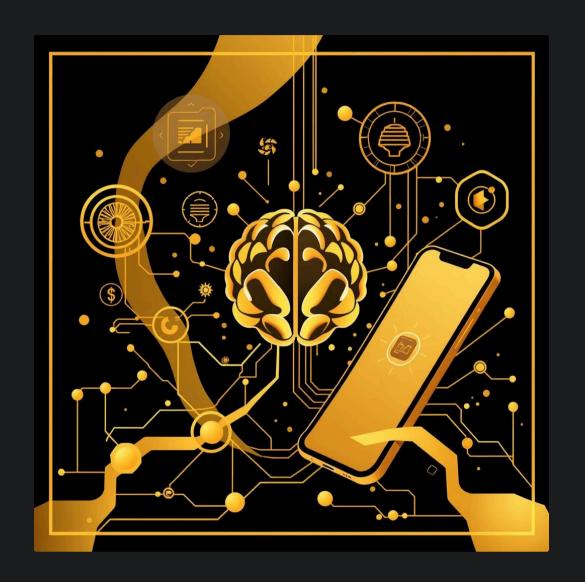
# AI & Machine Learning Foundations

- Learning Goals: Understand core ML concepts and data analysis techniques.
- Topics Covered: NumPy, Pandas, Matplotlib, ML Concepts: Supervised/Unsupervised Learning, Scikit-learn basics (Regression, Classification), NLP (text preprocessing, sentiment analysis).
- Key Python Libraries: NumPy, Pandas, Matplotlib, Scikitlearn, NLTK.
- Mini Project: Develop a Spam Mail Classifier or a Stock Price Predictor.

### Month 5:

## AI in App Development

- **Learning Goals:** Integrate advanced AI models into practical applications.
- Topics Covered: Integrating AI models in Flask/Django apps, Computer Vision with OpenCV, CNN basics (image classification), Chatbots (NLTK / Transformers).
- **Key Python Libraries:** TensorFlow/PyTorch, OpenCV, Transformers, NLTK.
- **Mini Project:** Create an Al-Powered Chat App or a Face Recognition Attendance system.



## Capstone Projects & Portfolio

Your final step: building a standout portfolio that speaks volumes about your expertise.

1

### Full-Stack AI App Development

Integrate front-end, back-end, and AI models to create complete, deployable solutions.

2

### Real-World Capstone Projects

Choose from advanced projects like AI Recommendation Systems, Virtual AI Assistants, or Medical Image Classifiers.

3

#### Showcase Your Work

Learn to package projects, host on GitHub, and optimize your resume and LinkedIn for tech roles.

### What Makes GaurCoder Different?

### End-to-End Curriculum

From basic Python to advanced AI integration, all in one place.



### Project-Centric Learning

Hands-on projects in every module to build practical skills and a robust portfolio.

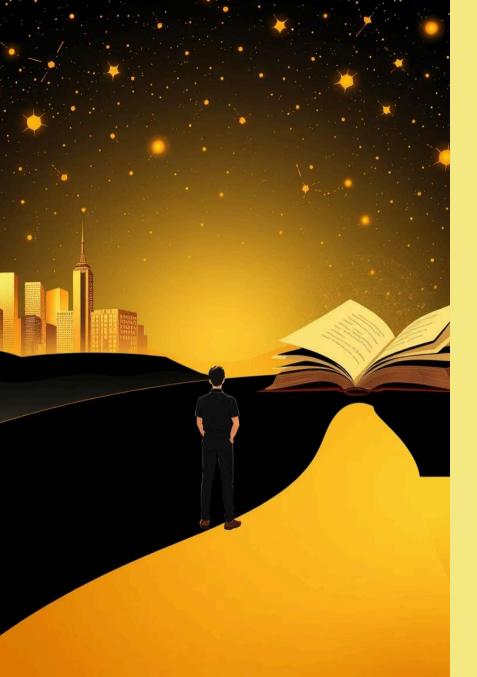
### Career-Ready Skills

Develop sought-after AI and machine learning expertise for immediate job readiness.



### Portfolio & Showcase

Guidance on building a professional portfolio for recruiters.



# Your Future Starts Here

Upon completion, you'll possess:

- Mastery of Python (from basics to advanced AI).
- 5 Mini Projects + 3 Capstone
  Projects showcasing diverse Al applications.
- A ready-to-showcase portfolio for jobs, freelancing, or higher studies.
- The confidence to build any AIpowered application.