

Goal	Actions to Achieve It	Resources / Tools	Target Completion
1. Strengthen advanced OOP and design pattern skills	Build a medium-scale Python project combining multiple design patterns (Factory + Observer + Singleton).	<i>Design Patterns in Python</i> (Udemy), GitHub, PyCharm	3 months
2. Improve software testing and automation skills	Learn and apply pytest and CI/CD pipelines (GitHub Actions).	pytest docs, GitHub Actions tutorials	4 months
3. Enhance UML and system design documentation	Use Draw.io to model a complete system from use case to implementation.	UML tools, module notes	2 months
4. Develop data structure and algorithm proficiency	Practise algorithmic problems on LeetCode focusing on Python implementations.	LeetCode, <i>Think Python</i> Chapters 5–17	6 months
5. Apply sustainability and clean code principles	Review and refactor previous code to improve efficiency, readability, and maintainability.	<i>Clean Code</i> by Robert C. Martin	Ongoing
6. Strengthen professional portfolio presentation	Update portfolio with all artefacts, UML diagrams, and reflections; add GitHub links for demonstration.	GitHub, LinkedIn, Canva	1 month