

Parth Patil

+91 9881746442 — Email/01parthpatil10@gmail.com — linkedin/parth patil — github/combox1234

Experience

Digital Nexus AI

LLM/Generative AI

27 May 2025 – 27 Sep 2025

Project: Code Debugger

- Developed a local code execution and debugging tool with automated language detection (C, C++, Python, Java) using regex-based heuristics.
- Implemented a sandboxed execution flow using temporary files and subprocess calls to safely compile and run user code.
- Built an evaluation module that compares program output against predefined test cases and generates helpful debugging feedback.
- Designed a modular structure for adding new languages or execution rules without rewriting core logic.

Project: MCP (Model Context Protocol) Server

- Built and customized an MCP (Model Context Protocol) server by working iteratively with AI tools (ChatGPT, DeepSeek) to understand architecture, generate boilerplate code, and troubleshoot complex components.
- Adapted and integrated AI-generated modules for routing, middleware, authentication, and debugging, ensuring they functioned together as a stable server system.
- Learned to evaluate, modify, and refactor LLM-generated code, improving readability, structure, and maintainability across multiple server components.
- Gained hands-on experience in managing AI-assisted development workflows, including prompt engineering, iterative refinement, and validating AI-produced logic.

Projects

Robotic Trash Collector

Python, YOLOv8

- Built a deep learning-based system to detect floating waste (plastic bottles, cans, cups) using YOLOv8.
- Achieved 80%+ precision on Kaggle-based dataset during classification tasks.
- Integrated Python + OpenCV for real-time video processing and tracking.
- Designed modular architecture supporting future upgrades such as autonomous navigation and solar-powered operation.

Skills

Languages C, C++, Python, Java

Concepts Machine Learning, Deep Learning, DSA, OOP,

Generative AI

Backend Spring 6, Spring Boot 3, REST APIs

models Transformer, LSTM, RNN, CNN, GAN

Databases MySQL, MongoDB

Tools Postman, GitHub, Git

Education

Pimpri Chinchwad College of Engineering, Pune (PCCOE)

2023 – Present

B.Tech in Computer Engineering

SNBP School and Jr. College, Rahatani

2021 – 2023

Higher Secondary Education (HSC)

Indira National School, Pune

2021

Secondary Education (CBSE)

Certifications

- Introduction to SQL — Simplilearn
- Data Structures in C++ — Udemy
- Java Basic to Advanced — Udemy

Extracurricular Activities

Spectrum (Jan 2024 – Feb 2024)

- Marketing Sponsorship Team Head
- Core Organizing Team Member

ACM Student Chapter (Sep 2024 – Apr 2025)

- Marketing Team Member