VINAYAK PALSE

Pune, India | vinayakpalse05@gmail.com | +91 9309934371 | LinkedIn | Portfolio

ABOUT ME

Currently pursuing B.Tech in the third year at Vishwakarma Institute of Technology, Pune. I have worked on several college level projects, showcasing my proficiency in **full-stack web development,** particularly with **MySQL** and backend integration. I have a strong foundation in problem-solving and am skilled at developing efficient and scalable web applications. I'm actively learning **Data Structures and Algorithms (DSA) in Java** and have solved 200+ problems on LeetCode, regularly participating in weekly coding contests to sharpen my algorithmic thinking. Currently, I'm expanding my expertise in **Artificial Intelligence (AI)**, **Machine Learning (ML)**, **and Data Science(DS).**

EXPERIENCE & INVOLVEMENT

Participating in **national-level hackathons**, focusing on **AI-integrated** and **DSA-oriented projects**.
Core contributor to the Social Welfare Development Committee (SWDC) at VIT, with certifications for Go-Green (Tree Plantation) and Police Mitra (Festival Crowd Management).Shortlisted for J.P. Morgan Chase **Code for Good Hackathon** 2025 – selected among top candidates from national-level applicants for technical and problem-solving excellence.

SKILLS

Languages: Java, C++, Python, C, JavaScript, HTML/CSS
Frameworks: React.js, Node.js, Express.js, Bootstrap
Databases: MySQL, MongoDB
Tools: GitHub, Git

Operating Systems: Unix/Linux (basic shell scripting, system navigation, terminal tools)**.**
Concepts: Data Structures (Arrays, Trees, Graphs, Hash Maps), Algorithms (Sorting, Searching, Dijkstra's, Recursion), OOPs.

EDUCATION

Vishwakarma Institute of Technology, Pune — 2023-Present
Bachelor of Technology in Artificial Intelligence and Data Science — **CGPA**: 8.8/10

CERTIFICATIONS

Java full stack development - **Scaler Academy**(2025-Present)

COMPETITIVE PROGRAMMING

- Solved 200+ problems on **LeetCode**.
- Regular weekly contest participant on **LeetCode** / **GFG**.

PROJECTS

Canteen-Crave: 2023-2024

- Front-end developer in a group project to create a canteen pre-ordering web app for students and staff.
- Enabled users to schedule food delivery/pickup based on time and location preferences.
- Published research paper related to this solution in Scopus-indexed journal.
- Technologies: *HTML, CSS, JS, Node.js, MySQL, Bootstrap*

Flight Route Optimization System: 2024-2025

- Designed an intelligent routing tool using **Dijkstra's Algorithm** to find the most efficient flight path based on distance or time.
- Visualized results using **Google Maps** for a more intuitive user experience.
- Reinforced DSA skills by handling graph data structures and shortest path logic.
- Technologies: *Python*, Google Maps API, gmplot, Matplotlib

AI-Based Question Paper Generator: 2024-2025

- Developed an AI-powered system that generates balanced question papers using a university-level question bank.
- Implemented DSA techniques such as **hash maps**, **shuffling**, **sorting**, and **filtering** to manage selection by topic and difficulty.
- Integrated **GPT-based APIs** to rephrase theoretical questions and dynamically modify numerical problems.
- *Technologies: Python, NumPy, Pandas, GPT-Neo API, LLaMA API*