

# ARYENDRA CHAUDHARY

Meerut, Uttar Pradesh | +91-9458456634 | [aryensiwach@gmail.com](mailto:aryensiwach@gmail.com)

**LinkedIn:** [linkedin.com/in/aryendra-chaudhary-97922224b](https://www.linkedin.com/in/aryendra-chaudhary-97922224b)

**LeetCode:** [leetcode.com/u/aryensiwach](https://leetcode.com/u/aryensiwach)

**GitHub:** [github.com/aryensiwach](https://github.com/aryensiwach)

**Portfolio:** [aryensiwach.github.io/aryendra-portfolio/](https://aryensiwach.github.io/aryendra-portfolio/)

## EDUCATION

Meerut Institute of Engineering and Technology, Meerut

B.Tech - Information Technology

2022 – 2026

Uttar Pradesh, India

## PROJECTS

**Cortex-V: A Neural Vector Search Engine** | Python, Flask, FAISS, PyTorch

- **GitHub Repo:** [github.com/aryensiwach/VectorSearchEngine](https://github.com/aryensiwach/VectorSearchEngine)
- Engineered a retrieval system by converting 2,000+ images into 512-dimensional vector embeddings using OpenAI's CLIP model.
- Achieved an average query latency of 90ms for Top-K similarity searches by implementing a highly optimized FAISS (L2) index.
- Developed a responsive Flask web application for real-time image queries, handling a 99% successful retrieval rate across test cases.
- Architected an end-to-end processing pipeline demonstrating the ability to scale to over 100,000+ images with minimal degradation.

**AI-Powered Code Evaluation Platform** | C++, REST API, Node.js, Firebase, Judge, Gemini AI

- **Website Link:** [internhub-c469b.web.app](https://internhub-c469b.web.app)
- Engineered the core C++ integration module connecting Judge & Gemini APIs, enabling real-time code compilation & AI-assisted evaluation.
- Optimized API calls, cutting evaluation latency by 30% and boosting throughput for concurrent requests, enhancing developer productivity by 20%.
- Developed AI-driven scoring and code quality suggestions, increasing evaluation accuracy by 25% over baseline rule-based systems.
- Architected a scalable backend tested with 200+ concurrent users, ensuring fault tolerance & low response times.

**Automated Face Recognition Attendance System** | Python, OpenCV, Tkinter, CSV/MySQL

- **GitHub Repo:** [github.com/aryensiwach/Face-Recognition-Attendance-System](https://github.com/aryensiwach/Face-Recognition-Attendance-System)
- Designed & deployed a GUI-based attendance automation system that dynamically mapped to the current timetable.
- Integrated real-time face detection & recognition (HaarCascade + LBPH) achieving 95%+ recognition accuracy across 500+ test samples.
- Automated database logging with timestamped records, improving record-keeping efficiency by 40% vs manual entry.
- Implemented multi-camera switching, reducing average attendance marking time from 3–4 mins to less than 30 sec/class.

## TECHNICAL SKILLS

**Languages:** C++, Python

**Core CS:** Data Structures and Algorithms, OOP, System Design, DBMS, OS, CN, TCP/IP, HTTP

**Databases:** MySQL, CSV Handling

**Frameworks and Libraries:** OpenCV, Tkinter, NumPy, Pandas, PyTorch, FAISS

**Developer Tools:** Git, GitHub, Firebase, REST APIs, Visual Studio Code

## ACHIEVEMENTS

- Solved 400+ coding problems across LeetCode, HackerRank, and Coding Ninjas — focused on DSA and problem-solving.
- Achieved LeetCode 100 Days Badge and Specialist Badge from Coding Ninjas.
- Hackathon Participation: Code Clash 2.0 and Adobe India Hackathon.

## CERTIFICATIONS

- C++ Programming – Infosys Springboard (May 2025)
- Problem Solving (Basic and Intermediate) – HackerRank