VAIBHAV KUMAR

+91 9462050067   vaibhav.udr21@gmail.com   linkedin.com/in/vaibhav-kumar-87557528a   github.com/Vaibhav-Kumar10

Education

VIT Bhopal University — **September 2023 – May 2027**
B.Tech in Computer Science   CGPA: 9.43 — *Bhopal, MP, India*

St. Gregorios Sr. Sec. School — **April 2018 – March 2023**
Class 12: 94.6% — Class 10: 94.0% — *Udaipur, Rajasthan, India*

Technical Skills

- **Languages & Frameworks:** Python(Django, Flask), C++, Flutter, Dart, Java, HTML, CSS
- **Tools:** Docker, Git, Postman, VS Code, Jupyter Notebook, Google Gemini API
- **Databases & Cloud:** MySQL, SQL, Firebase, AWS, GitHub Actions (CI/CD)

Work Experience

AlgoUniversity (YC S21) — **May 2025 – July 2025**
SWE Co-Op Intern — *Remote*

- Designed and developed a scalable **Online Judge platform** using **Django**, **HTML/CSS**, and **SQLite3**, containerized with **Docker** and deployed on **AWS EC2**.
- Engineered a secure multi-language code execution pipeline leveraging Python's **subprocess** module and **Docker-based isolation**, supporting Python, C++ and Java. with **100+ daily code submissions**.
- Introduced **real-time output evaluation**, role-based access control (RBAC), **reducing manual grading time** by **80%**.
- Streamlined **CI/CD pipelines** with **GitHub Actions** and **Docker** for continuous testing and deployment; boosted deployment frequency by **40%** through automated testing and rollouts.

Madhya Pradesh Police - Student Intern — **October 2024 – Present**
Bhopal, India — *Part-time*

- Selected for SIP 2025; collaborated with the Cyber Crime Cell, Forensic Unit, and Dial 100 HQ to observe real-time tools and strategies used in cybercrime investigations.
- Delivered cybersecurity awareness sessions to 300+ students and faculty at schools like Delhi World Public School, covering phishing, SIM swap, ATM fraud, and safe online behavior.
- Participated in open-house sessions with senior officials (IPS, AIGP), researched 10+ digital threats, and contributed to posters, surveys, and outreach campaigns promoting public digital safety.

Projects

HridayVayu – Smart Asthma Care System — **February 2025**
Tech Stack: *Python (Flask), Machine Learning, Sensor Integration*

- Developed an ML-based asthma prediction system integrating sensor data to identify early-stage risk patterns with **87% accuracy**.
- Implemented a real-time alerting and analytics pipeline to surface high-risk conditions, reducing average detection latency by **30%**.

CyberBuddy – AI Cybersecurity Chrome Extension — **February 2025**
Tech Stack: *Python, Google Gemini API, Chrome Extension API, ML, HTML/CSS* — *GitHub*

- Built a phishing detection browser extension that analyzes URLs in real time using an AI-based classification pipeline, using Google Gemini API.

Brew Crew – Reactive Cloud-Based Application — **December 2025**
Tech Stack: *Flutter, Firebase Authentication, Cloud Firestore, Provider, Streams* — *GitHub*

- Built a cloud-backed application using Firebase Authentication and Firestore streams to keep user data and UI synchronized in real time.
- Designed a layered architecture separating UI, state management, and backend services using **StreamProvider**.
- Established user-specific Firestore streams to update preferences live without manual refresh or explicit state synchronization.
- Applied event-driven programming principles to ensure UI consistency during authentication and data updates.

Certifications

- **Oracle -** Java Certified Foundations Associate (July 2025)
- **IBM –** SQL and Relational Databases 101 (March 2025), Python 101 for Data Science (March 2025)

Co-Curricular

Cisco Community, VIT Bhopal — **November 2024 – Present**
Core Technical Member

- Organized hands-on workshops and collaborated in multi-functional development teams.

Honors & Awards

- Spearheaded top **1.4%** selection among **40,000+ applicants** for **AlgoUniversity Accelerator (May 2025)**
- Selected for elite Graph Algorithms Bootcamp by Codeforces Master (Mar 2025)
- Achieved Top 3 rank in Class XII (CBSE, 2023) with **94.6%** in PCM stream