AKSHAT TRIVEDI

Full Stack and Software Developer

Kanpur, India | 9119964903 | akshattrivedi394@gmail.com | linkedin.com/in/akshat-trived1/ | github.com/Akshat394 | leetcode.com/u/cannister2k22

EDUCATION

- **Bachelor of Technology (B. Tech) in Information Technology**
  Pranveer Singh Institute of Technology, Kanpur, India
  CGPA: 8.1 (Till 5th Semester) | Expected Graduation: 2026
- **Class 12th – CBSE**
  Vishnu Bhagwan Public School, Prayagraj, India – Percentage: 73.6% | Year: 2022
- **Class 10th – CBSE**
  Vishnu Bhagwan Public School, Prayagraj, India – Percentage: 86.6% | Year: 2020

SKILLS

- **Languages:** Python, Java, C++, JavaScript, Go, Bash, SQL
- **Web & Backend:** Flask, Node.js, Express.js, Django
- **Cloud & DevOps:** AWS (EC2, Lambda, S3), Docker, GitHub Actions
- **Databases:** MongoDB, PostgreSQL, MySQL
- **AI/ML & Data:** TensorFlow, Scikit-learn, Pandas, NumPy, OpenCV, NLP, CNN
- **Tools & OS:** Linux, Git, VS Code, PyCharm, Android Studio
- **Concepts:** Data Structures, System Design, TCP/IP, REST APIs, OOP, SDLC

TECHNICAL PROJECTS

❖ **SmartRetail360 – AI-Powered Supply Chain Platform** *Jun 2025 – Sept 2025*

- Built end-to-end **Node.js/TypeScript microservices** (inventory, forecasting, delivery modes) with **WebSocket APIs** and **PostgreSQL back-end.**
- Integrated **ARIMA/LSTM/ensemble ML models** in Python service **(97.2% accuracy)** for demand forecasting and anomaly detection.
- Implemented **Dijkstra's algorithm with Google Maps API** to optimize delivery routes, reducing cost by 30% and **SLA breaches by 25%.**
- Developed a **React (Vite + TS) real-time dashboard** with live data, IoT sensor feeds, and sustainability metrics.
- Ensured production-readiness with **Dockerized CI/CD pipelines, Drizzle ORM, environment configs**, and role-based access control.

❖ **Hybrid Deepfake Detection System** *Mar 2024 – June 2024*

- Engineered a dual-path PyTorch model combining frame and **ASCII-conversion branches** with **BiLSTM fusion**, achieving **~96.3% accuracy.**
- Introduced a novel ASCII conversion layer, **reducing compute usage by 65%** while maintaining detection performance.
- Exposed inference via **FastAPI REST service**, containerized with Docker, **delivering <0.42 s/frame processing.**
- Built interactive **React/TypeScript UI featuring drag-and-drop uploads**, frame-level results, and real-time system metrics.
- Followed best practices: **modular architecture, unit testing, CI/CD deployment**, and support for Docker/Kubernetes environments.

EXPERIENCE

- ***The Vibe Coder – Software Developer Intern | Remote, Mar 2025 – Present***
  - Developed **Java/Python backend microservices** (FastAPI & PostgreSQL) delivering REST with 35% latency reduction.
  - Applied **OOP & SOLID design patterns**, **SQL schema design, transaction handling**, and automated Docker-based CI/CD pipelines.
  - Collaborated in Agile sprints using Git, code reviews, and cross-functional coordination to ship features on schedule.
- ***IEEE PSIT Chair & Research Associate | Kanpur, Jul 2023 – Present***
  - Led backend implementation of a deepfake detection **API (Python, PyTorch, REST),** reducing inference **latency by 40%.**
  - Employed **modular OOP design**, unit testing, and CI workflows to ensure software quality and maintainability.
  - Conducted **10+ technical workshops**, mentoring 20+ students in OOP, SQL, version control, and DevOps practices.

CERTIFICATIONS

- Salesforce AI Trailblazer Champion — **Salesforce Trailhead** (April 2025 – May 2025)
- Machine Learning Course — **Rinex Technologies** (Jun 2024 – Sept 2024)
- AWS Certified Cloud Practitioner — **Amazon Web Services** (Dec 2024 – Jan 2025)
- Certified Java Developer – Expert — **CJDE™** (Feb 2025 – Mar 2025)

LEADERSHIP & ADDITIONAL HIGHLIGHTS

- Facilitated 10+ technical workshops on full-stack development, Git, and cloud deployment.
- Active contributor on GitHub (Hugging Face, TensorFlow), maintaining ML/data utility repositories.
- IEEE Chair: Organized 10+ AI/ML/IoT workshops; led full-stack teams and promoted open-source contributions.
- Focused on solving real-world problems with accessible, ethical, and user-centric technology.
- Solved 300+ Problems on Leetcode and Hackerrank