Rahul Kumar

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♥ Portfolio • In linkedin.com/in/rahuly1606 • ♀ github.com/Rahuly1606

Professional Summary

An ambitious B.Tech Computer Science student with strong programming and system-level software understanding (Java, Python, Linux). Experienced in cloud-native development, containerized deployments, and full-stack applications. Passionate about building scalable, reliable systems and collaborating in global, cross-functional teams.

Education

B.Tech in Computer Science & IT (Honors Through Experiential Learning)

Koneru Lakshmaiah Education Foundation, Vijayawada, Andhra Pradesh GPA: 9.44

July 2023 – August 2027

Technical & Consulting Skills

- Programming & Systems: C, Java, Python, OS Concepts (Unix/Linux), Data Structures & Algorithms, Networking
- Frontend & UI: ReactJS, HTML5, CSS3, Tailwind CSS
- Backend & APIs: Node.js/Express, Django, RESTful API development, Authentication
- Cloud & DevOps: AWS (EC2, Lambda, S3), Docker, CI/CD, Microservices
- AI/ML: OpenAI APIs, NLP, AIML, GAN
- Consulting Skills: Requirements analysis, Stakeholder communication, Scoping, Risk mitigation

Projects

AI-Enabled Virtual Classroom System

GitHub — Live Demo

- Built a scalable full-stack virtual classroom using React, Node.js, Express, and MongoDB, with modular APIs, automated CI/CD on Render, and improved deployment lead time.
- Integrated low-latency video conferencing through Jitsi/WebRTC and real-time messaging with Socket.IO, supporting more than 100 concurrent users.
- Added AI features: OpenAI-based assignment generation from transcripts and a multilingual chatbot for student support.

ArcFace Attendance System (Face Logbook)

GitHub — Live Demo

- Built an InsightFace + FAISS attendance system with under 100 ms latency and 50–200 times faster matching for over 100,000 faces.
- Developed a Flask REST API with SQLAlchemy, JWT authentication, MySQL backend, and a React dashboard for bulk import and real-time analytics.
- Deployed a Dockerized CV pipeline using OpenCV, NumPy, caching, and auto-tuned FAISS indexing (Flat/IVF/HNSW).

Vaani Connect (EPICS with Purdue University) — Backend Developer (Ongoing)

GitHub

- Developing a backend for a voice-translation app: dialect-aware NLP pipelines, language detection, and image-to-voice processing.
- Implemented REST endpoints and queue-based audio transcription/TTS for resilient UX under poor network conditions.
- Collaborating with an international team to define features, define API contracts, and plan testing/deployments.

Experience

Infosys Springboard Intern (AI/ML Track) – Infosys Limited

Present

- Built an end-to-end semantic search pipeline for QueryTube (YouTube data + transcripts \rightarrow embeddings \rightarrow index).
- Benchmarked SentenceTransformers models and similarity metrics; tuned top-k and thresholds to improve retrieval (top-1/top-3 recall).
- Delivered a Gradio demo for stakeholders and handled scoping, requirement translation, and progress reporting.

Mentor & Technical Lead (Apeksha Club, KL University)

Jan 2023 – Jul 2024

- Mentored 15+ juniors on Python, Java, and algorithms; conducted workshops on algorithm design and optimization.
- Organized hackathons and coordinated logistics and participants, practicing stakeholder management and event delivery.

Certifications

• GitHub Foundation

GitHub

MongoDB

• Programming in Java

NPTEL

• Salesforce Certified AI Associate

Salesforce

• MongoDB Certified Developer

Cambridge Assessment

• Linguaskill (B1) – Strong English communication

Awards & Achievements

- Winner College Coding Competition (ZeroOne Code Club Ladder 0.1)
- Finalist AixPlainX Hackathon (education project for rural areas)
- Runner-up GDG (KL University) Hackathon (Internal Round) 2024

Additional: Solved 300+ problems on LeetCode; active on CodeChef