# Revanth Guthula

revanthgwork@gmail.com | | +91 90326 58749 | | github.com/rev2607 | | linkedin.com/in/rev2607 | | www.revanth.cloud

# Summary

Final-year B.Tech student in Al & Data Science with strong skills in C++, Python, and system design. Passionate about scalable software development and applying Al/ML to solve real-world problems.

#### Skills

Languages: C++, Python, SQL

Systems & Tools: Linux, Docker, Git, Databases
Cloud Platforms: AWS, GCP, Azure, Vercel, Render

AI/ML: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, FastAPI, LLMs (OpenAI, Ollama), LangChain

## Work Experience

#### Ghar Ka Khana, Mumbai

Jul 2025 - Present

#### Software Developer Intern

- Designed and implemented a distributed, fault-tolerant web application for restaurant ordering using Next.js and Supabase ensuring high availability and scalability for thousands of concurrent users.
- · Optimized API performance and database queries, reducing response time by 30% under heavy load.
- Built authentication, secure API layers using Supabase & Twilio, ensuring data integrity and seamless user experience.
- Tech stack: HTML, CSS, TypeScript Next.js, React, Supabase, Twilio, AWS, Docker

## **Project Work**

#### Mini RAG Q&A Bot with LangChain and OpenAl

GitHub Link

- Built an end-to-end RAG system for private datasets, delivering context-aware answers with sub-500ms latency.
- Productionized a lightweight API with observability, optimized embeddings/chunking, and CI-ready mock pipelines.
- Tech stack: Python, FastAPI, LangChain, OpenAI API, ChromaDB, Hugging Face tokenizers/embeddings, pytest

#### Redis-X (Redis-like In-Memory Database)

GitHub Link

- Designed a scalable, high-performance, event-driven server with a custom binary protocol; optimized concurrent I/O and pipelining, reducing p95 latency and increasing throughput.
- Built progressive-rehash hash map, AVL ZSETs, and min-heap TTL; implemented fault-tolerant expiration and monitoring, enabling O(1)/O(log n) ops and cost-efficient memory usage.
- Tech stack: C++17, Linux, TCP sockets, pthreads, Hash map, AVL tree, Heap, Python

## DataPulse — Scalable Data Health Monitoring System

GitHub Link

- Built to ensure data quality in enterprise-scale pipeline analyzing 10M+ records for missing values, outliers, and drift.
- Used asynchronous task execution and containerization to reduce data validation time by 40%.
- · Tech stack: FastAPI, Python, Scikit-learn, React, Docker

### Education

## **KL University Hyderabad**

Aug 2022 - May 2026 (Expected)

Bachelor's of Technology in Artificial Intelligence and Data Science

CGPA: 7.76/10

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Networks, Database Management Systems, Machine Learning, Deep Learning, Big Data Analytics, Probability & Statistics, Data Science & Visualization

# Achievements & Certifications

- Published "An Enhanced SVM Model Optimized with Minimum Bayes Error Rate for Mental Disorder Detection" Springer ICT4SD 2025
- · Google Cloud Digital Leader Certified
- Microsoft Azure Al Engineer Associate Certified
- NXP AIM India 2024 (Regionals) Built an obstacle-avoiding robot with ROS2 lane detection, applying real-time decision-making and distributed robotics concepts.