Ruthesh Medaboina

Hyderabad, India

+91-86886 53175 — ruth.dev.v1@gmail.com — LinkedIn — GitHub — Portfolio

Summary

Software Development Engineer with strong foundations in **computer science fundamentals**, including **object-oriented design, data structures, algorithms, and problem solving**. Experienced in designing and building **scalable, distributed backend and full-stack systems** using **Java, Python, Django, React, relational databases, and AWS**. Passionate about creating customer-focused products, handling ambiguity, and delivering high-quality software in fast-paced, agile environments.

Technical Skills

Programming Languages: Java, Python, C, C++, JavaScript, SQL
Backend & Distributed Systems: Django, Spring Boot, RESTful APIs, Distributed Systems Concepts, Multi-tier Architectures
Databases: PostgreSQL, MySQL, MongoDB (Relational and NoSQL)
Frontend: React.js, Next.js, HTML, CSS
Cloud & DevOps: AWS, Docker, CI/CD Fundamentals
Computer Science: Data Structures, Algorithms, OOP, Complexity Analysis, OS, DBMS, Networking
Tools: Git, GitHub, Linux

Projects

Literature Summarizer – Distributed Query System
Python, Streamlit, LangChain, FAISS, AWS, LLaMA

- Designed a distributed application to ingest, index, and query large volumes of PDF documents.
- Built scalable **storage, indexing, and query components** using FAISS for vector-based retrieval.
- Implemented a **Retrieval-Augmented Generation (RAG)** pipeline to generate accurate summaries.
- Improved system throughput by **40%** by parallelizing document ingestion and processing.
- Focused on performance, fault tolerance, and extensibility of backend components.

Hybrid Cryptographic Communication System
Python, Django, AES, RSA

- Designed and built a secure communication system using symmetric and asymmetric cryptography.
- Implemented backend services for secure key exchange, encrypted storage, and message delivery.
- Applied algorithmic problem-solving to meet security and data integrity requirements.
- Implemented secure key lifecycle handling, including generation, exchange, and rotation.
- Designed modular and reusable backend components following clean code principles.
- Tested encryption workflows and validated system behavior against common security edge cases.

Education

ACE Engineering College	Aug 2025
Bachelor of Technology in Information Technology	Hyderabad, India
Sri Chaitanya Junior College — Intermediate (Class XII),	2021
Johnson Grammar School (CBSE) — Class X,	2019

Certifications & Achievements

- AWS Cloud Practitioner
- Oracle Generative AI Professional
- NPTEL Python Certification
- Cisco C & Networking
- Solved **200+** Data Structures and Algorithms problems
- Active participant in coding contests and hackathons