
PROFESSIONAL SUMMARY

Software Engineer building Python/FastAPI backends, distributed data systems, and applied AI across LLM/RAG, retrieval, and agentic workflows. Shipped latency-sensitive APIs, evaluation harnesses, concurrency-safe services, and containerized delivery with measurable gains in accuracy, reliability, and latency.

TECHNICAL SKILLS

Languages: Python, Java, SQL, C++

Backend & Data: FastAPI, REST APIs, PostgreSQL, CockroachDB, Redis, SQLAlchemy, FAISS

AI & ML: Scikit-learn, Pandas, NumPy, NLP, Embeddings, RAG, LLMs, Amazon Bedrock

Cloud & DevOps: AWS (Lambda, SQS, KMS, CloudWatch), Docker, Jenkins, CI/CD, Git

EXPERIENCE

Lalataksha Consulting Services Private Limited

Junior Software Developer

2025 – Present

- **Backend Platform:** Architected and shipped Python/FastAPI services and PostgreSQL document-processing workflows with async job orchestration and Redis caching, cutting **p95 API latency by 41%** while supporting **15,000+ documents/month**.
- **LLM & Retrieval:** Built semantic chunking, embeddings, FAISS retrieval, schema-constrained outputs, and validation, raising field-level extraction accuracy from **79% to 92%** on a held-out evaluation set.
- **Evaluation & Quality:** Built model/API regression gates around extraction contracts and held-out evaluations, catching schema regressions before staging and making model changes reproducible.
- **Delivery Reliability:** Dockerized services and automated Jenkins CI/CD with health checks and rollback gates, reducing release effort by **60%** while hardening deployments against regressions.

PROJECTS

Trace | *Python, CockroachDB, SQLAlchemy, Amazon Bedrock, AWS*

- Built an institutional-memory runtime for software teams: GitHub webhook ingestion, transactional outbox, SQS FIFO workers, tenant-scoped **1024-D vector retrieval**, schema-constrained Bedrock reasoning, and provenance-aware memory lifecycle in CockroachDB.
- Engineered idempotent admission, SQL serialization retries, FIFO deduplication, encrypted DLQ handling, and fail-closed deterministic checks; a live **10,000-row** vector benchmark measured **79.5 ms median / 90 ms p95** DB execution, with **51 tests passing**.

JANUS | *Python, FastAPI, PostgreSQL, SQLAlchemy, React, LLMs*

- Built a merchant-side authorization gateway for AI buyers combining signed mandates, deterministic hard-policy gates, evidence-bound semantic scoring, human step-up, and Razorpay test-mode execution.
- Implemented replay resistance, prompt-injection quarantine, concurrency-safe execution/revocation, transactional rollback, and auditable decisions; verified **100/100 hard-policy cases**, **50/50 injections quarantined**, **25/25 end-to-end scenarios**, **0 unauthorized orders**, and **0.61 ms p95** hard-gate latency.

Aspect-Based Sentiment Analysis | *Python, LSTM, GRU, BERT, RoBERTa, NLP*

- Designed an ensemble ABSA pipeline combining LSTM/GRU and BERT/RoBERTa with aspect-aware preprocessing, achieving **92.1% macro-F1** and a **6.4-point** gain over the strongest single-model baseline.
- Built class-balancing, ablation, and error-analysis workflows; reduced minority-class false negatives by **28%** and productionized FastAPI inference at **120+ predictions/sec** in local load tests.

Phishing Detection | *Python, Scikit-learn, Pandas, Streamlit*

- Engineered lexical, host, and URL-structure features and trained an ensemble classifier on **50,000+ URLs**, reaching **98.3% ROC-AUC** with sub-**50 ms** local inference.
- Built reproducible preprocessing, model-versioning, and calibrated threshold evaluation, reducing false-positive rate by **37%** at **95% recall**.

EDUCATION

Vignan's Lara Institute of Technology & Science

Bachelor of Technology – Computer Science Engineering

Andhra Pradesh, India

Dec 2021 – Apr 2025

ACHIEVEMENTS

- Published peer-reviewed **ABSA research** in **AIP Conference Proceedings**.
- Solved **200+ problems on CodeChef** across multiple difficulty levels.