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Professional Summary

I architect and build AI systems that work in the real world. From prototype to production, I focus on creating intelligent solutions that are reliable, scalable, and useful. My work spans Generative AI, Agentic AI, MLOps, AIOps, Retrieval Augmented Generation, custom Large Language Models and Vision Language Models applications, and end-to-end ML pipelines.

Education

Bachelor of Engineering in Computer Science and Engineering (AIML)

Sep 2023 – Jun 2027

KPR Institute of Engineering and Technology

CGPA: 8.5/10

Relevant Coursework: Data Structures and Algorithms, Machine learning, Deep Learning, OOPs, Database Management Systems, Computer Networks.

Skills

- **Languages:** Python, Java, SQL, Rust.
- **Databases:** Qdrant, VectorDBs, PGVectorDB, Redis, PostgreSQL, MySQL.
- **NLP & LLMs:** Diffusion models, text2sql, Transformers, seq2seq, Visual language models, MultiModal Large Language Models, TTS and STT.
- **Frameworks:** Tensorflow, Pytorch, Keras, Langchain, Agno, FastAPI.
- **Optimization Techniques:** Quantization, Distillation, Pruning, QLoRA, KV caching.
- **DevOps & Tools:** Git, Github, Docker, ONNX Runtime, CI/CD(Github Actions).
- **Leadership & Management:** Strategic Planning, Team Leadership, Organizational Development, Financial Oversight, Business Strategy, Market Analysis, Stakeholder Engagement, Financial Management.
- **Soft Skills:** Communication, Decision Making, Problem-Solving, Negotiation, Cross Functional Leadership.

Professional Experience

Ascentium (Incorp) - Generative-AI/ML Engineer

June 2026 – Present

I am developing enterprise-grade AI solutions for intelligent document processing, automated classification, and semantic analysis. My work includes building OCR and NLP pipelines, developing production-ready applications, and deploying scalable services. I focus on delivering reliable AI automation that improves business efficiency and accuracy.

— **Technologies:** *Python, PyTorch, LangChain, LlamaIndex, FastAPI, Docker, and Azure.*

PhobosQ - Agentic AI Engineer (Call Analytics)

Dec 2025 – Mar 2026

Worked on building components of a real time call analytics system that supports 12+ Indic Languages, specialized for indian calls because STT trained on 40 million indian voice calls which is in local slang, involving stream processing, speech AI, and Natural language pipelines. Developed data ingestion workflows for processing audio streams, implemented speech to text and text analysis models, and contributed to data engineering tasks for storing and querying large conversational datasets.

— **Technologies:** *VoIP, PBX, Speech to text, Kafka, TensorFlow, PostgresSql, FastAPI, Docker.*

RD Technology - Machine Learning Engineer

Dec 2024 – Jan 2025

Trained and optimized machine learning models for classification, regression, and prediction, focusing on hyperparameter tuning to boost accuracy. I developed automated evaluation to ensure consistent performance across diverse datasets and noisy environments. Additionally, I worked on the deployment of these models as functional FastAPI end-points for internal testing, effectively bridging the gap between raw research and production ready APIs.

— **Technologies:** *Python, TensorFlow, Keras, Scikit-learn, Pandas, NumPy, SQL, FastAPI, Git, Docker.*

Project Work

- **AI-Market-Intelligence** [Demo](#)
An event driven market intelligence platform using Kafka to ingest and process high throughput financial data streams. The asynchronous multi agent architecture generates real time predictive insights via XGBoost and ARIMA, leveraging MLflow for experiment tracking and Docker for scalable, low latency microservice deployment.
Technologies: Mlflow, Kafka, Langfuse, XGBoost, FastAPI, ARIMA, Docker.
- **AI Tutor (Virtual Teaching Assistant)** [Github](#)
RAG based AI tutor using Agno and LangChain, achieving 90 percent accuracy through Unsloth fine tuning. The project automates lesson generation and integrates Manim to programmatically create mathematical animations, bridging the gap between static text and visual understanding in real time.
Technologies: Agno, Langchain, Unsloth, RAG, Manim, Dspy, FastAPI.
- **.Ink** [Github](#)
This is a multi modal agentic system that transforms live lectures and YouTube podcasts into structured personalized style notes and mind maps. By implementing an asynchronous pipeline with OpenCV and PyMuPDF, the engine efficiently synthesizes unstructured video data into scalable, visual knowledge representations for better information retention.
Technologies: Open CV, PyMuPDF, Fitz, Agentic AI(agnos), Docker, FastAPI.
- **AI-based milk quality Assessment** (SIH)
Designed an Machine Learning system for the Resazurin dye reduction test to assess milk freshness via microbial activity detection. Trained a Random Forest classification model to predict milk quality grades from colorimetric data.
Technologies: MLflow, Random Forest Classification, Gradio, Feature Store.
- **Git2Doc** [Demo](#)
A task orchestration pipeline that automates GitHub repositories into technical code review documentation. The system utilizes PostgreSQL for persistent state management and Crawl4ai for data extraction, rendering architecture diagrams via Graphviz to eliminate manual reporting efforts. Deployed in huggingface.
Technologies: Crawl4ai, Graphviz, pygithub, PostgreSQL, Agno.
- **HireAI** [Demo](#)
Automated recruitment engine powered by FastAPI and WebSockets for real time candidate screening. The platform integrates Qdrant (Vector Database) for high dimensional semantic matching and Agno agents to automate the hiring lifecycle, resulting in a 70 percentage reduction in recruiter workload and manual turnaround time.
Technologies: Pydantic, Qdrant, Agno, websockets, Fastapi, edge tts.
- **Hushh.ai - Hackathon** [Github](#)
Architected a collaborative student ecosystem integrating a Discord style community interface with a deep RAG based AI support. The platform centralizes lecture materials, allowing students to utilize Large Language models for personalized explanations, interactive quizzes, and competitive coding challenges.
Technologies: FastAPI, PostgreSQL, pgvector, AgnoOS, Langsmith.

Certifications

- **RDBMS PostgreSQL** - IIT Bombay (2025)
- **Industry 4.0 And Industrial Internet Of Things** - NPTEL (2025)
- **Artificial Intelligence and Deep learning techniques** - IBM (2024)
- **Python Developer** (2024)

Leadership and Achievements

- **Finalists** - GCCX, Hushh.ai Hackathon
- **Best Coder Award, Project Presentation Winner** - Coimbatore Institute of Engineering and Technology
- **Project Presentation Winner** - Coimbatore Institute of Engineering and Technology
- **400+ Github Contributions**