Darshil Shah

Data Scientist | Machine Learning | GenAI & LLMs

+91 8866775000 shahdarshil97@gmail.com linkedin.com/in/-darshil darshil.in

Experience

Aviso AI **Feb 2026 – Present**

Data Scientist II | Python, LangGraph, LangChain, LLM, AWS, TrueFoundry, LLM observability *Bangalore*

- **Context-Aware Summarization:** Designed and built an 11-node **LangGraph** based agentic pipeline that classifies calls across Sales, Post-Sale, Internal and Outbound, then routes each call to LLM workflows for context-aware summaries and insights.
- Built LLM-driven **participant role assignment, call-type/sub-type classification, and domain-specific insight generation**, incorporating CRM, participant and revenue-intelligence context into summarization; deployed via **TrueFoundry** with AWS ECR and LLM tracing for production observability.
- **Smart Trackers:** Built a human-in-the-loop, few-shot LLM framework that lets clients create custom conversation trackers by providing initial phrases, retrieving semantically similar historical sentences from **AstraDB**, and annotating relevant examples as Yes/No to create tracker-specific positive and negative few-shot datasets.

VISA Inc. **June 2025 – Feb 2026**

Data Scientist | Python, SQL, Pandas, Machine Learning, LLM, RAG, OpenAI API *Bangalore*

- Built **Langchain powered Customer 360 Dashboard** using **Retrieval-Augmented Generation (RAG)** and **OpenAI GPT-4.1** enabling natural language queries for user profiling and segmentation to answer business queries eliminating SQL querying.
- Built scalable **Name Matching** pipeline to search billions of vendor records with spelling errors/abbreviations by **fine-tuning Sentence BERT with triplet loss** and applying fuzzy match only on top-K candidates — improving query latency.

PayU Payments Pvt Ltd **Jan 2023 – June 2025**

Data Scientist | Python, SQL, Pandas, Machine Learning, NLP, AWS, EC2 *Bangalore*

- Trained & deployed CatBoost based Machine Learning model for **Lead Prioritization** to identify premium quality leads for online Used-Car Reseller & Online Gaming Platform. Achieved **3.7x Lift** & **2.1x Lift** respectively.
- Developed an Income Estimation solution using SMS by leveraging **BERT** for **Name Entity Recoginition (NER)** to extract **amount** and classify SMS as Debit or Credit, boosting accuracy by **2.8%** and coverage by **35%** over traditional methods.
- Developed a multilingual **Indian Address Standardization** solution using **IndicBART**, fine-tuned with **PEFT/LoRA**, to parse unstructured addresses into structured components and handle spelling errors and partial addresses.
- Designed & developed a framework to predict Propensity-to-Purchase in the next month using machine learning model for Grocery, Food, Fashion & other industries. With mean model performance of **92.7% AUC & 65 KS**.

MINRO Lab - IIIT Bangalore **Aug 2020 – Jan 2023**

Research Associate | Python, TensorFlow, Keras, OpenCV, Deep Learning. *Bangalore*

Jekson Vision Pvt. Ltd **June 2019 – Aug 2020**

Image Processing Engineer | Python,C++, SQL, TensorFlow, OpenCV, Deep Learning, CUDA, GPU *Ahmedabad*

- Optimized Tablet Inspection System (TIS) using Computer Vision on GPU and increased the inspection speed by **39%**.
- Enhanced the Tablet Inspection System (TIS) using Deep Learning algorithms, achieving **7%** increase in accuracy.

Publications

1. Deep Learning based EEG Analysis using Video Analytics **October 2022**
Accepted to 29th IEEE International Conference on Image Processing (**ICIP**), 2022.

2. Multi-dimensional Analyses (1D, 2D and 3D) of EEG using Traditional Methods and Deep Learning **July 2022**
Accepted to Frontiers in Signal Processing, Biomedical Signal Processing, 2022.

4. VCA-Net: Visual Creativity Analysis using Deep Neural Network **May 2022**
Accepted to 13th ACM Indian Conference on Computer Vision, Graphics & Imagce Processing (**ICVGIP**), 2022.

Education

International Institute of Information Technology - Bangalore **Aug 2020 – Jan 2023**

Master of Science in IT (Specialization: Data Science, Machine Learning, Deep Learning) *3.78*

Institute of Technology - Nirma University | B.Tech in IC **June 2015 – June 2019**

Technical Skills

Languages: Python, SQL
Machine Learning Frameworks: PyTorch, Tensorflow, Pandas, HuggingFace, PySpark, OpenCV, Git, Docker, LLM-as-a-Judge
Generative AI: LangChain, LangGraph, OpenAI, Gemini, Claude, AWS Bedrock, RAG, Prompt Engineering, LLM Observability & Tracing
Expertise: Machine Learning, Deep Learning, NLP, LLMs, LLM fine-tuning, Computer Vision, AWS (EC2, S3, ECR)