

VAISHNAVI LALWALA

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🌐 [Vaishnavi-Lalwala](#) | 🌐 [VaishnaviLalwala.github.io](#)

EDUCATION

- Pandit Deendayal Energy University, Gujarat** Gandhinagar, Gujarat
Bachelor of Technology in Computer Engineering - CGPA: 9.07 2021 - 2025

EXPERIENCE

- Blue Data Consulting.** Surat, Gujarat
AI/ML Engineer June 2025 - Current
 - Engineered **Real-time AI voice agents** by fine-tuning conversational pipelines using Vapi.ai, ElevenLabs, and HTTP webhooks; integrated Airtable and MongoDB for dynamic contact handling, automating 100+ weekly support calls and reducing human intervention by 75%.
 - Orchestrated scalable automation flows with Make.com, ngrok, and Postman, enabling seamless API chaining and multi-platform voice execution resulting in accelerated deployment cycles by 40%.
- InfoString Technolabs Pvt. Ltd.** Rajkot, Gujarat
Machine Learning Intern Dec 2024 - May 2025
 - Developed **Creative Insights Engine** using an LSTM network to personalize video-editing app recommendations, boosting user engagement by 35% and average session length by 22%.
 - Engagement by 35% and average session length by 22%. Built StyleVision Recommender with a CNN to classify and suggest visual editing styles in design tools, increasing feature adoption by 29%.
- Adsengine Media** Rajkot, Gujarat
Machine Learning Engineer May 2024 - June 2024
 - Boosted model accuracy by 18% in a marketing analytics project by fine-tuning LSTM, CNN, and MAML models to predict customer engagement and campaign performance.
 - Reduced inference time by 35% and improved scalability by optimizing pipelines to process large volumes of client and market data in real-time.

PROJECTS

- Multi-Task Learning for Skin Lesion Analysis** Dec 2024 - May 2025
Python, TensorFlow, Keras, OpenCV, NumPy, Pandas, Scikit-learn, Albumentations, ViT, U-Net
 - Designed a multi-task pipeline using Vision Transformers (ViT with attention heads) for classification and U-Net with Conv2D layers for segmentation on HAM10000; achieved 75.8% and 84% accuracy.
 - Applied advanced preprocessing (hair removal: 94% artifact reduction), ImageNet normalization, Albumentations, Dice+BCE loss, and 5× data augmentation to boost generalization and reduce overfitting by 9%.
- End-to-End Multimodal GenAI Document Processing Platform** Dec 2024 - Jan 2025
LangChain, FAISS, RecursiveCharacterTextSplitter, Gemini Vision, PIL, Streamlit
 - Developed a Document Intelligence Engine using RAG with Gemini Pro, achieving 95% extraction accuracy and 87% time reduction.
 - Built a multimodal pipeline with cross-modal retrieval, processing 8 languages with 98% accuracy and \$120K annual savings..

SKILLS

Agentic AI and LLM Tools: Vapi.ai, ElevenLabs, LangChain, LangGraph, OpenAI API, Gemini API, Tesseract OCR, AutoGPT, CrewAI, Autogen, Hugging Face Transformers.

Deep Learning and Machine Learning Frameworks: Neural Networks, Transformers, Attention Mechanisms, CNNs, RNNs, LSTM, ViT, U-Net, Scikit-learn, TensorFlow, Keras, PyTorch, Pandas, NumPy, PIL, StreamLit, Pydantic, OpenCV, NLTK, Albumentations, Mediapipe.

Backend and API Development: MCP Server, FastAPI, Flask, RESTful APIs, Websockets, Docker, Git, ngrok, Webhooks, Amazon API Gateway, AWS Lambda, AWS Deep Learning Containers, Amazon SageMaker.

Programming Languages: Python, R, SQL, Java, C/C++, Bash, Shell Scripting

Databases: MySQL, Amazon RDS, MongoDB, Pinecone, FAISS, Airtable.

RELEVANT COURSEWORK

–Operating Systems, Data Structures and Algorithms, Design Pattern, Object Oriented Programming, Cloud Computing, Computer Networks, Database Management Systems, Theory of Computation, Design and Analysis of Algorithms, Compiler Design, Big Data Analytics.