

VAISHNAVI CHAUDHARY

Patiala, Punjab, 147004

☎ +91-7250-235887

✉ vaishnavipixy@gmail.com

🌐 [VaishnaviChaudhary](https://www.linkedin.com/in/VaishnaviChaudhary)

🌐 [vaishnavichaudhary.com](https://www.vaishnavichaudhary.com)



github.com/vaishnaviinit

Education

Bachelor of Technology

Thapar institute of Engineering and Technology

August 2025 – Present

Patiala, Punjab

Projects

Fem AI | *Next.js, Javascript, Node.js, FastAPI, Python, PostgreSQL, Scikit-Learn, XGBoost*

- Architected a microservices-based women's health assessment platform by separating Node.js API Gateway, Authentication Service, and Python ML Service, enabling scalable model inference and independent deployment.
- Trained and evaluated Random Forest, Decision Tree, Logistic Regression, and two XGBoost models (Lite model on key features and Full model on all 41 clinical features), exposing predictions through FastAPI endpoints integrated into real-time health assessment workflows.

Sign Language Translator | *Python, OpenCV, TensorFlow, WebSockets, FastAPI, RAG, Computer Vision*

- Built a real-time sign language translation pipeline using Computer Vision and Deep Learning models to detect gestures from webcam streams and convert them into textual representations with low-latency inference.
- Integrated RAG-based contextual sentence generation to transform isolated gesture predictions into meaningful conversations and streamed translated messages through WebSocket servers for real-time chat communication.

Cyber Defense System | *React, Python, PostgreSQL, Redis, Docker, Nginx, Playwright, ML*

- Developing an automated cybersecurity defense platform that continuously monitors browser activity, emails, and web sessions to detect phishing attacks, malicious links, fake login pages, and suspicious user behavior in real time.
- Leveraging Playwright-based browser automation, threat intelligence pipelines, Redis-backed event processing, ML-driven threat detection models, and containerized deployment through Docker and Nginx.

DevFlow | *Next.js, TypeScript, Node.js, Express.js, PostgreSQL, Prisma, JWT, Socket.IO*

- Building an all-in-one developer collaboration platform integrating project management, real-time communication, GitHub workflows, collaborative whiteboards, and AI assistance within a unified workspace architecture.
- Designed a modular monolith backend using Express, Prisma, PostgreSQL, and JWT authentication with scalable workspace management, role-based access control, and extensible module architecture for future real-time collaboration features.

DocuMind | *React, Node.js, Express.js, FastAPI, LangChain, ChromaDB, MongoDB, Cloudinary, RAG*

- Developing an AI-powered document intelligence platform that enables users to upload documents, retrieve grounded answers through Retrieval-Augmented Generation (RAG), and interact with documents using citation-backed conversational search.
- Architected a multi-service system separating React frontend, Express backend, and FastAPI AI service with LangChain pipelines, vector embeddings, and document ingestion workflows for scalable document understanding.

Echo | *React, TypeScript, FastAPI, Pinecone, Groq, RAG, SQL*

- Created AI-powered digital product agents that deliver personalized customer journeys and intelligent product recommendations through context-aware conversational interfaces.
- Implemented Retrieval-Augmented Generation (RAG) pipelines using Pinecone vector search and Groq LLMs to provide hyper-contextual product assistance and dynamic customer engagement.

Technical Skills

Programming Languages: JavaScript, C,C++, Python, TypeScript

Frontend Technologies: React.js, Next.js, Tailwind CSS, HTML5, CSS3

Backend Technologies: Node.js, Express.js, FastAPI, RESTful APIs

Databases: MongoDB, PostgreSQL, MySQL

DevOps & Cloud: Docker, Git, GitHub, Vercel, Nginx, Playwright

AI/ML Tools: Groq, Scikit-learn, RAG

Achievements & Certifications

Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate

Oracle

Aug 2025

Credential ID: 102344985OCI25AICFA

Winner – Feature Creep Hackathon

Intra College ACM Hackathon

Nov 2025