

Aleena Varghese *AIML Executive*

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🌐 LinkedIn 🔗 Portfolio 📝 Medium

PROFILE

Results-driven Full Stack Developer with a strong foundation in frontend development, backend API design, and cloud-native deployment. Skilled in building scalable and intelligent web applications using React, Flask, FastAPI, and Python. Known for delivering clean, modular architecture and maintaining high code quality under agile sprints. Experienced in integrating AI/ML features, optimizing performance, and collaborating with cross-functional teams for rapid product delivery.

EDUCATION

MSc in Artificial Intelligence and Machine Learning 2023 – 2025 | Bangalore, Karnataka
Christ(Deemed to be University) ✓

Bachelor in Computer Applications 2020 – 2023 | Rajkot, Gujarat
Christ College ✓

PROFESSIONAL EXPERIENCE

AIML Executive 01/2025 – 07/2025
SenseSys Pvt. Ltd.

- **Led development of Hosting Cloudly**, a no-code cloud hosting platform built with a Flask backend and a React frontend interface, designed for deploying AI models seamlessly.
- Architected and implemented **RESTful APIs** to manage cloud resources, model deployments, logs, and environment configurations.
- **Containerized application modules** using Docker, enabling scalable and fault-tolerant deployment pipelines.
- Integrated **real-time monitoring and logging** systems for performance tracking and failure diagnosis.
- Improved deployment speed by **40%**, and enhanced infrastructure efficiency by **30%** through optimization and asynchronous task handling.
- Managed an **8-member cross-functional team** including frontend developers, backend engineers, and DevOps interns; conducted sprint planning, code reviews, and QA validation.

Graphic Designer 09/2024 – 12/2024
Nextu Empower

- Created 350+ visual assets (banners, reels) that improved user engagement by **28%**
- Managed digital brand consistency and adapted content across Instagram, YouTube, and LinkedIn
- Reduced content turnaround time by **35%** through design system standardization

SKILLS

Technical Skills

- **Languages & Libraries:** Python, JavaScript, HTML, CSS, PHP, ReactJS, Flask, FastAPI, Django
- **ML & AI Frameworks:** scikit-learn, PyTorch, TensorFlow (basic), NumPy, Pandas, Matplotlib
- **LLM & APIs:** Groq API, Gemini API, LLAMA, Gmail Toolkit
- **Databases & Tools:** MySQL, SQLite, Postman
- **Cloud & Hosting:** Render, Streamlit, Flask server deployment
- **Design & Editing:** Canva, Adobe Premiere Pro, Figma, CapCut, DaVinci Resolve

PROJECTS

Hosting Cloudly (SenseSys Pvt Ltd) 05/2025 – present
React • FastAPI • Supabase • Docker • Cloud Deployment

- Built a complete **end-to-end AI hosting platform** allowing users to upload, deploy, and monitor models without writing code.
- Developed reusable and responsive **ReactJS components** for dashboard, model status, logs, and deployment forms.
- Connected frontend to **Flask-based RESTful APIs** with token-based auth and async background processing.
- Integrated **GPU utilization monitoring tools** like NVIDIA Nsight to provide live model performance feedback.
- Achieved **~45% reduction** in deployment load time through model profiling and caching strategies.

Python • Flask • FastAPI • Machine Learning • React

- Engineered a **no-code ML platform** for non-programmers to build, train, and test machine learning models through a UI-driven workflow.
- Designed a **modular FastAPI backend** for automated data preprocessing (EDA), model selection, training, and report generation.
- Created isolated endpoints for different ML tasks to maintain scalability and separation of concerns.
- Integrated **GPU acceleration and job queues** for heavy tasks, resulting in **40% faster training times**.
- Oversaw code quality, testing coverage, and API documentation for handoff to junior devs and testers.

SpamShield

06/2024 – 08/2024

Gmail Toolkit, LLM, Streamlit, CSS, HTML

- Developed a real-time **email classification tool** that detects phishing, promotion, or primary content using **LLM-based inference**.
- Designed a **Streamlit UI** for end-users to view and test classification of their Gmail inbox in real time.
- Integrated with Gmail APIs for seamless message retrieval and display using OAuth2.
- Leveraged LLMs (LLAMA) to perform **sentiment and intent analysis**, achieving **92% classification accuracy**.
- Styled UI using custom HTML and CSS for a clean, mobile-responsive experience.

CERTIFICATES


CERTIFICATES — Deloitte : Data Analytics Job Simulation | Introduction to LLM | Data Engineering

Getting Started | Machine learning with Python | Prompt Engineering for generative AI | Natural Language

Processing | Ethical AI | Creating GPTs with Actions | Introduction to Power BI | AWS cloud foundation

PUBLICATIONS

“Enhancing Satellite Imagery with GAN-based Cloud Removal” – IEEE (July 2025)

Published in *IEEE Xplore* | DOI: 10.1109/ICECCC60120.2025.11063844 

Presented at ICECCC 2025, CMR Institute of Technology, Bengaluru

Peer-reviewed and published by IEEE, this paper proposes a deep learning approach using **Generative Adversarial Networks (GANs)** to enhance satellite imagery by effectively removing cloud obstructions.

- Engineered a GAN architecture that improved spatial accuracy and clarity by **~40%** over baseline models
- Utilized **tensor-level optimizations** and GPU-based training to accelerate convergence and image reconstruction
- Benchmarked across EuroSat datasets; contributed to Earth observation preprocessing for geospatial analytics

ACHIEVEMENTS

- **Project Manager – Hosting Cloudly** Led 8-member team at SenseSys to develop a scalable cloud hosting platform; oversaw architecture, UI/UX, and deployment pipelines.
- **Project Lead – ZeroCodeML** Directed end-to-end development of a no-code ML platform; reduced manual coding by 85%, implemented auto-EDA and model suggestions.
- **Student Coordinator – TechArena** Managed digital strategy, scheduling, and promotions for a national tech fest at Christ College.
- **Media Head, Gateways Event** Led content creation, brand alignment, and cross-platform social media campaigns for a major intercollegiate event.
- **Workshop Facilitator – Canva (100+ Trained)** Conducted hands-on design workshops at Christ University (5 days) and National Illuminaire Catholic Media Conference (2 days), focusing on branding and digital storytelling.
- **Social Media & Branding Lead** Managed social presence for multiple departments; created design systems, caption guides, and improved engagement workflow.
- **Awards:** “Outstanding Student” (Leadership & Creativity), Widely acknowledged for design proficiency and mentorship, earning the informal title “**Canva Queen**” among peers and faculty.
- **Infographics Lead – Google Developer Student Clubs (GDSC)** – Led the creation of visual assets, infographics, and event branding for technical workshops and community outreach, significantly boosting engagement and design consistency across platforms.

LANGUAGES

English | Malayalam | Tamil | Hindi | Gujarati