

Aleena Varghese *AIML Executive*

✉ aleenatheresa024@gmail.com ☎ 9499719173 📍 Bangalore, Karnataka 🐙 Github
🌐 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 AIML 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 – Present
SenseSys Pvt. Ltd.

- **Leading 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 **20i APIs** to manage cloud resources, model deployments, logs, and environment configurations.
- Integrating **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.
- Managing an **8-member cross-functional team** including Jr. 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
- **Reporting & Analytics:** Google Sheets, Microsoft Excel (Pivot tables, VLOOKUP, basic macros), Tableau, Power BI (basic knowledge)
- **LLM & APIs:** Groq API, Gemini API, LLAMA, Gmail Toolkit
- **Databases & Tools:** MySQL, SQLite, Postman
- **Cloud & Hosting:** Render, Streamlit, Flask server deployment

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 20i 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.

ZeroCodeML : No-Code Machine Learning Platform

11/2024 – 04/2025

Python, Flask, Machine Learning, React, scikit-learn, Matplotlib

- Developed a no-code ML platform to automate the entire machine learning pipeline for users without technical backgrounds.
- Implemented support for both classification and regression tasks with automated data preprocessing, algorithm selection, model training, and evaluation.
- Integrated multiple ML algorithms with performance metrics like Accuracy, F1-score, RMSE, and R2 Score.
- Currently extending the platform with multimodal data support to handle images, text, and structured data in a unified pipeline.

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

LEADERSHIP & CONTRIBUTOR EXPERIENCE

- **Project Lead – Hosting Cloudly & ZeroCodeML** Leading an 8-member team at SenseSys to develop an AI hosting platform; guided a 3-member team at Christ University to build a no-code ML tool.
- **Volunteer – ICSAC 2024** Committee member at International Conference on Sustainable Advanced Computing.
- **Media Head – Gateways 2023** Led content, branding, and social media for National Intercollegiate Tech Event.
- **Student Coordinator – TechArena** Handled digital strategy & scheduling for Christ College's National IT Tech Fest.
- **Workshop Facilitator – Canva** At Illuminare National Catholic Media Conference and trained 100+ students at Christ University in design, branding, and storytelling.
- **Social Media & Branding Lead** Managed digital identity & engagement for campus teams.
- **Infographics Lead – GDSC** Created visuals and event designs, boosting reach.
- **Outstanding Student Award– Christ College (CS Dept.)** Recognized for excellence in academics, leadership, and contribution.

LANGUAGES

English | Malayalam | Tamil | Hindi | Gujarati