Gautham Vijayaraj

24337 Pne Spg Ln, Aldie, VA 20105 • (602) 247-0511 • gvofficial99@gmail.com

LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

Aspiring AI Engineer with a strong foundation in LLMs, Generative AI, and multi-agent systems. Experienced in building end-to-end AI products using OpenAI, Gemini APIs, Hugging Face, and real-time translation pipelines. Proven ability to combine software engineering with AI to create accessible, impactful solutions. Completed the M.S. in Computer Science (Cybersecurity) at Arizona State University with a CGPA of 3.87. Eligible for **OPT (F-1 visa)** from **July 1, 2025**.

PROFESSIONAL EXPERIENCE

AI Engineer

Reveille Technologies, Inc., Charlotte, NC | **July 2025 – Present**

- Built multi-agent pipelines that supported features like medical query resolution and form auto-fill using LLM APIs. Contributed to planning modules and autonomous flows with reasoning logic in agentic design.
- Built RAG pipelines to fetch relevant financial insights from structured and unstructured sources.

Founding Mobile App Developer

CrateDig, Tempe, AZ | **July 2025 – Present**

- Implemented real-time UX flows with Flutter and REST APIs for chatbot and CRM dashboard workflows.
- Created dynamic UI flows for investment portfolios with REST API integration and Flutter animations.
- Leveraged Git, Agile tools, and prompt engineering to build reliable, responsive AI interfaces.

Software Developer Intern

HCLTech, Chennai, India | **August 2024 – Dec 2024**

- Designed user workflows for an AI-powered financial assistant, enabling users to query stock performance or portfolio risks via NLP interfaces.
- Developed and containerized GenAI microservices using React, Node.js, and MongoDB for real-time healthcare data analytics. Built an internal tool for medical recommendations using GPT-based summarization.
- Containerized multi-agent pipelines with Node.js and Docker to support modular GenAI features like diagnosis prediction, patient Q&A, and medical form completion.

Graduate Services Assistant - Blockchain Systems (Research)

Arizona State University, Tempe, AZ | **Sep 2023 – Dec 2023**

- Collaborated with Dr. Stephen S. Yau on research in blockchain-based data integrity systems, contributing to smart contract development and architecture design using Solidity and Ethereum testnets.
- Conducted in-depth literature reviews and technical analysis on blockchain applications in Intelligent Transportation Systems, with a focus on secure peer-to-peer communication models.

Flutter Developer

Magicstep Solutions Private Limited, North Lakhimpur, India | **December 2022 – Jul 2023**

- Developed and maintained the Flutter-based mobile application for food delivery utilizing Dart and PHP.
- Integrated advanced functionalities, including real-time tracking, push notifications, and payment gateways.
- Conducted thorough testing, including unit testing and UI testing, to maintain code quality and reliability.

Assistant System Engineer

Tata Consultancy Services, Chennai, India | **Jun 2021 – Nov 2022**

- Developed React + TypeScript dashboards for financial tools; optimized SQL handling of 1M+ transactions daily.
- Implemented dashboards that consumed AI predictions from backend models to alert users on anomalies, risk exposure, or transaction trends.

Software Engineer – HCL TechBee Program

HCLTech, Chennai, India | **Jun 2019 – May 2021**

- Successfully completed HCL TechBee's 12-month early career program, covering intensive training in full-stack development, data structures, software engineering, and machine learning fundamentals.
- Developed and deployed responsive web applications using HTML, CSS, JavaScript, and React as part of internal tools and client-facing portals.
- Built machine learning models using Python (scikit-learn, pandas) to automate data analysis tasks and support decision-making for operational teams.

Python Developer

Encore Theme Technologies, Chennai, India | **Jun 2018 – May 2019**

- Built and deployed RESTful APIs using Flask, enabling seamless integration of machine learning models into web-based fintech applications.
- Developed and trained supervised learning algorithms to detect suspicious cryptocurrency transactions, improving fraud detection accuracy by 25%.
- Designed a modular Python backend pipeline to preprocess financial data, train ML models, and expose predictions via Flask endpoints.

Software Engineer Intern
Encore Theme Technologies, Chennai, India | **Jan 2018 – Jun 2018**
- Developed responsive and interactive front-end interfaces for a cryptocurrency platform using modern JavaScript frameworks. Integrated APIs and display real-time blockchain data securely and efficiently.

EDUCATION

Master of Science: Computer Science (Cybersecurity)
Arizona State University, Tempe, AZ — **May 2025**
CGPA: 3.87/4.00
Bachelor of Technology: Computer Science and Engineering
SRM Institute of Science and Technology, India — **May 2021**
CGPA: 3.33/4.00

SKILLS

- **GenAI & ML**: OpenAI API, Gemini API, Hugging Face Transformers, LLM Fine-tuning, CNN, BiLSTM, BLIP
- **AI Agent Systems**: Prompt engineering, RAG pipelines, multi-agent workflows, streamlit, LangChain
- **Backend**: Flask, Python, FastAPI, Node.js, REST APIs, MongoDB, Redis, Spring Boot, Java
- **Frontend**: React.js, JavaScript, HTML/CSS, Tailwind, Flutter
- **DevOps & Cloud**: Docker, GitHub Actions, AWS (EC2, S3), GCP, Firebase
- **Other**: Git, Figma, Webpack, Jest, Mocha, UX/UI Design

PROJECTS (more available in my portfolio website)

Startup Copilot *(Multi-Agent GenAI System)* GitHub
- Built a multi-agent AI system that converts startup ideas into MVPs using Gemini APIs and custom prompts.
- Designed agents for idea parsing, tech stack selection, GTM planning, and RAG-based case study generation.
- Deployed as a full-stack app (Node.js + HTML + JS) with smooth sequential UI.

Zoom Lang Buddy *(2nd Place – Zoom Campus Spark Challenge 2025)* Demo
- Real-time GenAI companion that translates Zoom speech into ASL and other languages.
- Built using RTSM, Flask backend, animated frontend, and WebSocket communication.

Automated Image Captioning (Fine-Tuned) GitHub
- Implemented an image captioning pipeline using the Hugging Face BLIP model.
- Integrated with UI for real-time image uploads and descriptions.

Twitter Sentiment Analysis (ML Pipeline) GitHub
- Built and compared 5 models (SVM, Logistic Regression, CNN, BiLSTM) on tweet data.
- Achieved ~85% macro-F1 on test data after extensive hyperparameter tuning.

Music Recommendation System (Spotify API and Random Forest) GitHub
- Built a custom music recommendation engine by collecting 100,000+ tracks using the Spotify API and training a Random Forest model to predict playlists based on audio features like tempo, valence, energy, and danceability.
- Integrated model predictions into an interactive UI Flutter, enabling users to filter songs by mood or genre and receive AI-curated playlists with ~82% classification accuracy.

CERTIFICATIONS (more available in my portfolio website)

- IBM Certified Generative AI Engineering Professional

PUBLICATIONS

- Revolutionizing Data Security with Reverse Swap Index Shifting (RSIS) — IEEE Link
- Is Studio Ghibli Overrated or a Timeless Classic? A Design & Storytelling Analysis — Article Link
- My Cover Letter as Python Code: How I Mixed Sincerity with Syntax — Article Link

Additional Information: Willing to relocate anywhere in the US