

ALVIN C. ADEFUIN

Laguna | Makati City | adefuinalvin1@mail.com | +63 919 698 4489 | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

AI Software Developer specializing in RAG systems, semantic search, and AI-powered applications using Python, FastAPI, React, and LangChain. Built AI chat widget generating 1,800+ leads (29% conversion) for 9 organizations and semantic search system processing 40,000+ SKUs with 3-4x faster response times through intelligent caching.

PROFESSIONAL EXPERIENCE

AI Software Developer

Aug 2023 - Present

Journey Better Business Group Inc. | Makati City

AI Chat Widget

- Built and deployed a production RAG-powered chat widget (React/Preact + Flask) handling 4,500+ conversations from 3,000+ unique users, generating 1,800+ qualified leads (29% conversion).
- Designed a distributed knowledge base (1,200+ chunks, 230+ docs) and processed 47,000+ LLM API calls, ensuring real-time responses with citations and file upload support.
- Developed multi-tenant, multi-region deployment (US & EU) supporting 9+ client organizations, with analytics dashboards via Retool and Sentry-based observability.

AI-Powered Natural Language Search System

- Transformed product discovery for medical equipment distributor by building semantic search system processing 40,000+ SKUs with 3-4x faster response times via intelligent caching
- Architected production RAG pipeline using FastAPI, Typesense, and OpenAI that handles complex scientific queries with context-aware category classification and intelligent filter extraction
- Created TypeScript/Next.js interface with transparent query debugging, model number normalization, and category-specific brand ranking

Web Developer Intern

Feb 2023 - Apr 2023

Highly Succeed Inc. | Remote

- Designed web application UI for optimal user experience and integrated web APIs for seamless functionality
- Collaborated with development teams using Agile methodologies and resolved tickets through Jira
- Contributed to frontend development and participated in code reviews

TECHNICAL SKILLS

Frontend: React, Preact, Next.js, TypeScript, HTML/CSS

Backend & APIs: Python, Flask, FastAPI

AI/ML Technologies: RAG, LangChain, OpenAI API, Semantic Search, Vector Embeddings

Databases: PostgreSQL, Firebase, Supabase

Tools: Docker, Typesense, GitHub Actions, Sentry, Vercel, Railway, Retool, Jira

EDUCATION

BS Computer Science | 2019 - 2023

Laguna University

- Best in Thesis Award — Led development of KASAKA agricultural ML application using Next.js, Flutter, and Firebase with Naïve Bayes classification.