

# Advaidh C

Software Engineer

## Executive summary

Software Developer with hands-on experience building world-class applications powered by AI and modern backend/frontend technologies. Skilled in building practical, project-based solutions that address real user needs and deliver reliable results. I'm excited about the opportunity to contribute to your incredible growth journey.

## Projects

### Enterprise Search RAG Application

**Tech Stack:**Angular, Python, FastAPI, LangChain

- Designed a user-friendly Angular interface with secure authentication and seamless PDF rendering for browsing and searching documents.
- Implemented document ingestion, embedding generation using Sentence Transformers, and vector storage with FAISS for high-performance retrieval.
- Built a FastAPI backend that performs semantic search and uses Azure Openai's gpt model to generate accurate, context-aware responses.
- Utilized LangChain to manage document loaders, embedding pipelines, and retrieval workflows for production-style modularity.

### AI Supported Voice Assistant System

**Tech Stack:**Python, FastAPI, Twilio Voice API, Azure OpenAI (GPT-4/4o)

- Developed an intelligent voice-based appointment scheduling system using Python, Twilio Voice, and Azure OpenAI LLM.
- Implemented real-time speech processing, date/time extraction, and conversational flow management using Faster-Whisper and VAD
- Integrated backend logic with FastAPI to validate technician availability, handle user intent, manage retries, and log appointments reliably.
- Designed a production-ready workflow with structured call handling, natural fallback responses, and Excel/database-based appointment storage.

### Money Scope: AI Currency Pair Analysis

**Tech Stack:** Python, LangGraph, Angular, Groq API (Llama3)

- A full-fledged AI-powered forex analysis web application with an Angular-based interface integrated with Groq's Llama3 model.
- Implemented real-time exchange rate retrieval, currency conversion, and automated financial insights generation.
- Developed an AI-driven analysis workflow using LangGraph to combine live market data with structured reasoning.
- Designed a responsive and interactive Angular UI with report download functionality and live progress indicators to enhance user experience.

### Salesforce ETL & API Integration Project

**Tech Stack:** Salesforce Apex, SOQL, Flow, Vlocity, Spring Boot

- Built an ETL workflow to connect Salesforce product and order data with an external Spring Boot API to simulate real-world system integration.
- Developed Apex classes and SOQL queries to extract product and order details from Salesforce CPQ, convert them into JSON, and send them to an external API.
- Configured Salesforce Flows to automatically trigger data synchronization whenever product pricing or order records were updated in Vlocity CPQ and Order Management.
- Created a Spring Boot REST API to receive Salesforce data, enrich product pricing and order status, and complete the end-to-end integration cycle.

### AI Powered Test Automation Tool

**Tech Stack:**Python, FastAPI, ReactJS, Azure OpenAI, Azure Devops, MongoDB

- Developed an AI-powered tool capable of reading user stories, requirements, acceptance criteria and other details including linking work items from ALM tools.
- Utilizes GPT-4 to deeply understand requirements and generate reliable test cases in line with business needs.
- Enhanced the tool to automatically generate Selenium automation scripts for generated test cases/URL.
- Connected to various platforms like Azure Devops, Jira etc, to fetch and update work items automatically.

## Skills and Certifications

- Skilled in programming languages including Python,JavaScript,Angular/ReactJS, and Node.js.
- Have hands-on experience with AI frameworks such as LangChain, LangGraph, and CrewAI for developing AI-supported applications.
- Experienced in working with relational and NoSQL databases such as MySQL, MongoDB, and PostgreSQL.
- Proficient in version control using Git with hands-on experience in collaborative development workflows.
- Familiar with development tools and IDEs such as VS Code, StarUML, Sublime Text, and UIPath Studio.
- Completed Oracle Cloud Infrastructure (OCI) AI Foundations Certification.
- Certified through NPTEL in Ethical Hacking and Joy of Computing using Python.