

# Antony Sajesh

(469) 427-9889 | [antony.sajesh@utdallas.edu](mailto:antony.sajesh@utdallas.edu) | <https://www.linkedin.com/in/antony-sajesh> | <https://github.com/ant-saj123>

## EDUCATION

The University of Texas at Dallas B.S. Computer Science

May 2027

Honors: Eugene McDermott Scholar, National Merit Scholar

GPA: 3.75

Relevant Coursework: Computer Architecture, Data Structures and Algorithms, Probability and Statistics

## SKILLS

Languages: C++, CSS, HTML, Java, Javascript, Python, SQL

Frameworks/Libraries: Agile, Beautiful Soup, FastAPI, Flask, Langchain, Langsmith, Node.js, pandas, PyTorch, React, Typescript

Tools/Databases: Amazon Web Services, DynamoDB, Figma, Git, Google Cloud Platform, MongoDB, MySQL, Pinecone, Postman

Soft Skills: Analytical Thinking, Communication, Problem-Solving, Public Speaking, Teamwork

## EXPERIENCE

Verizon – Software Engineering Intern, Irving, TX

May 2025 – Present

- Engineered a sentiment analysis feature for the Verizon OneCloud chatbot, improving user satisfaction by 30% through **React** UI updates, **Python** backend logic for sentiment-based intents, and conversational flow in **Google Dialogflow**.
- Deployed a multimodal input system that reduced average support resolution time by 25%, combining an **AWS Lambda** function with **FastAPI Python** backend APIs, and rigorously tested endpoints via **Postman** for high reliability and speed.
- Improved accuracy by 40% by optimizing the **Retrieval-Augmented Generation** pipeline with sentence-transformers/all-distilroberta-v1 for embedding and ms-marco-MiniLM-L-12-v2 Cross-Encoder for relevance-based reranking.
- Resolved multiple infrastructure issues by leveraging **AWS CloudWatch** logs to debug **Lambda** runtime handler errors and reconfiguring the Application Load Balancer to successfully propagate updates and support stable deployments.

Verizon – Software Engineering Intern, Irving, TX

May 2024 – Aug 2024

- Pioneered the frontend development of an application utilizing **React** to guide internal Verizon teams in selecting the optimal cloud service provider or on-premise data center for their workloads through an interactive decision tree
- Integrated the **Gemini API** and AI prompt engineering techniques utilizing **Python** into the application for enhanced application functionality and informed decision-making leading to a 25% increase in accurate cloud-provider suggestions
- Designed over 30 detailed **Figma** mockups alongside Verizon India offshore teams to model all necessary functionalities and pages that the user could potentially interact with and utilized **Postman** to thoroughly test multiple API's
- Collaborated with stakeholders and the Cloud Governance and Architecture team to understand the business requirements for the online portal and researched different cloud providers such as **AWS**, **Azure**, **Google Cloud**, and **Oracle Cloud**

## PROJECTS

ProductPilot – Personal Project

May 2025 – Jun 2025

- Built an AI-powered Product Management Copilot Agent that automates PRD generation, roadmap drafting, and sprint planning using **Retrieval-Augmented Generation** pipeline, reducing manual PM workload by 70% during internal tests
- Developed a custom document ingestion pipeline to embed over 30+ planning documents into **Pinecone**, using **LangChain**, **OpenAI embeddings**, and recursive chunking for precise context retrieval with 95% relevance
- Built an intelligent AI agent backend using **FastAPI**, **LangChain**, and **GPT-4**, supporting multi-turn reasoning with memory and RAG-based responses and integrated a custom **TypeScript** frontend for interactive product management workflows

SidekickAI – Personal Project

May 2025 – Jun 2025

- Designed an agentic AI assistant using **LangGraph**, enabling the agent to autonomously perform tasks such as managing calendar events, sending emails, searching YouTube, and generating documents, saving over 40% of manual effort each day
- Integrated comprehensive tracing with **LangSmith**, capturing detailed step-by-step reasoning of the AI agent's decisions, resulting in a 60% reduction in debugging and improving overall reliability
- Leveraged **Google Cloud Platform (GCP)** to seamlessly incorporate tools like Google Calendar, Gmail, and YouTube Data API, maintaining a success rate of 98%, with average response times under 1 second for all agent-initiated actions

## LEADERSHIP AND ACTIVITIES

Product@Dallas – Mentee, Richardson, TX

Jan 2025 – Present

- Led product development for a mock Reddit feature redesign, drafting a comprehensive PRD to address user retention and onboarding challenges, and proposed gamification and notification features to improve user retention rates
- Conducted market research and competitor analysis on Discord and Facebook Groups, synthesizing insights from app reviews, user feedback, and public reports to identify gaps in Reddit's engagement strategy and inform feature prioritization
- Designed annotated mockups and user flows in **Figma** to illustrate proposed solutions, and developed an A/B testing and KPI tracking plan to measure engagement improvements while presenting findings and roadmaps to mentors for feedback

FinTech UTD – Development Team, Richardson, TX

Feb 2024 – Present

- Collaborated with a team for the development of a news article scraper with a focus on extracting and analyzing market sentiments surrounding various stock market securities and commodities, employing **Beautiful Soup** and the **yfinance API**
- Implemented a sophisticated sentiment analysis calculator utilizing **Python** to distill insights from news articles, facilitating data-driven decision-making processes for traders and investors