### TIMOTHY VILLARAZA

in timothyvillaraza () timothyvillaraza

Note: An interactive, AI-powered version of this resume, which I developed and host, can be found at timothyvillaraza.azurewebsites.net

## **SKILLS**

PROGRAMMING LANGUAGES: Python, C#, Typescript/JavaScript, PostgreSQL, SQL Server, C/C++

FRAMEWORKS: .NET, ASP.NET MVC 5, React, Django, FastAPI, Flask

**CLOUD:** Azure, Amazon Web Services

PROFICIENCIES: Cloud Hosted Enterprise Applications, Full Stack Development, Backend Development, RESTful API Development

### PROFESSIONAL EXPERIENCE

Slalom
Technology Advisory Services | Associate Consultant (Software Engineer)

Chicago, IL Sep. 2022 - Aug. 2024

Back End Developer

- · Developed microservices and API endpoints using Azure Functions for an enterprise application hosted on Azure.
- Built a scalable .NET microservice for a non-profit food bank, porting Tableau scripts to C# with LINQ and SQL for data aggregation and reporting. Achieved faster data calculations in early tests, laying the foundation for future dashboards and optimizing reporting.
- Refactored core .NET backend logic, replacing a rigid three-tier hierarchy with a dynamic tiering solution. This improved flexibility supports the organization's 2023-2024 growth plans by enabling the addition of new tiers.
- Enhanced SQL procedures to deduplicate recipient data, ensuring accurate tracking of tens of millions of people receiving food assistance.
- Contributed to developing Python scripts for large dataset transformations, supporting data migrations for a global fast-food chain.

#### Front End Developer

- Developed a WordPress location finder in PHP for a multinational agricultural client, helping customers locate bulk commodity pickup sites.
- Redesigned an internal events website in React with mobile-friendly Figma designs, enhancing accessibility for thousands of employees.
- Developed and integrated TypeScript-based front-end APIs to track interest statistics of thousands of users globally for upcoming events.

#### Cross-functional Skills

- · Upskilled and developed AI projects as part of a company AI Upskilling Initiative, including hackathons, workshops, and AI sales assistance.
- Provided technical expertise in ongoing sales pursuits, contributing to effort and timeline estimation.

Zego

Chicago, IL

Associate Software Engineer

Aug. 2021 - May 2022

- Developed new features, enhancements, and documentation for the internal utility billing web application using ASP.NET MVC 5.
- Executed a web application styling rebrand, taking ownership of the key stories to ensure seamless alignment with the new visual identity.

Chicago, IL

Software Engineer Intern

Jun. 2021 - Aug. 2021

Engineered quality-of-life changes and bug fixes for the internal utility billing web application using the ASP.NET MVC 5 framework.

# **PROJECTS**

#### Interactive Resume Retrieval Augmented Generation (RAG) Web App

Sep. 2024

Developed a Python backend and React frontend web app on Azure to create an interactive resume experience. Powered by Azure Functions, OpenAI models, and PostgreSQL (PGVector), it retrieves resume sections scraped nightly from Creddle and uses GPT-4 for personalized responses.

#### Azure Video Retrieval Augmented Generation (RAG) API

Jun. 2024

Developed an AI-powered Python API on Azure to retrieve YouTube transcripts and enhance user queries. It uses a scalable three-tier architecture with session-based interactions, integrating Azure Functions, OpenAI, LangChain, PGVector, PostgreSQL, and GitHub Actions for CI/CD.

### **AI Activity Planner**

Mar. 2023

Winner of the "Best Use of Microsoft Cloud for Your Community" Category for the MLH All In Hackathon

Built a web app in ASP.NET Core and Tailwind CSS that generates itineraries based on user interests, location, and weather using GPT-3.5-Turbo.

### **EDUCATION**

### CERTIFICATES

**University of Illinois Chicago**Jan. 2020 - May 2022
Bachelor of Computer Science Software Engineering Concentration

AWS Certified Cloud Practitioner Salesforce Certified AI Associate Feb. 2023

Latin Honors: Cum Laude

May 2024