

Joseph Nguyen

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EXPERIENCE

Software Engineer – PSU Capstone

- Collaborated with a team of 9 software developers over a 6-month period to deliver a production-ready application used daily by professionals - Automated Email Responder
- Held regular meetings with clients to discuss project milestones, ensuring the product met their requirements
- Utilized LangChain to build a modular, full-featured LLM application that scrapes PSU's bulletins, FAQ documents, and websites for up-to-date information

Python Developer – PSU Data Engineering Team

- Collaborated with a team of 3 other data engineers to design and implement an ETL data pipeline using Google Cloud Pub/Sub, automating the publication and consumption of tens of thousands of Trimet data points daily.
- Ensured data reliability by persisting verified and transformed data in a cloud-hosted PostgreSQL database, with additional redundancy via JSON file storage.
- Developed interactive bus route visualizations using MapBox GL, enabling real-time map rendering and enhanced user experience for web applications.

IT Technician – Safe Harbor Solutions LLC

- Provided technical support and resolved hardware and software issues for clients, demonstrating strong problem-solving skills
- Managed billing documents and utility accounts using Microsoft Excel to ensure accurate and efficient record-keeping

PROJECTS

Gogym

A fitness tracking application enabling users to log exercises, create workouts, and monitor progress

- Engineered a REST API using Golang to efficiently manage user data, workouts, and exercises.
- Implemented robust authentication and authorization features for secure and controlled access

TranslatOCR

An OCR application that detects text from images, translates it, and re-renders a new image with the translated text

- Developed a comprehensive image processing workflow for accurate text detection and translation
- Leveraged the Google Translate API and Meta's LLama 3.1 model to ensure high-quality, reliable translations

Ragmail

AI-powered Retrieval-Augmented Generation (RAG) app for reading emails and generating draft responses

- Designed and implemented RAG architecture to enhance response accuracy by allowing the LLM to reference relevant, user-provided information
- Incorporated answer grading mechanisms to improve precision and reduce hallucinations in AI-generated responses

TECHNICAL SKILLS

Full-Stack Development	Cloud & DevOps	Data & Databases	Tools & Security
React, TypeScript, JavaScript, Next.js, HTML/CSS, Golang, Node.js, Express.js, FastAPI, Flask, Django, Prisma, RESTful, GraphQL	AWS, GCP, Azure, Docker, Kubernetes	PostgreSQL, MySQL, SQLite, MongoDB, Google Pub/Sub, RabbitMQ, Pandas, TensorFlow	Git, GitHub, GitLab, Pytest, Jest, Selenium, OAuth, JWT, Encryption

EDUCATION

Portland State University

Bachelor of Science, Computer Science

June 2024

GPA: 3.84

University of Dallas

Bachelor of Arts, Philosophy

May 2019

GPA: 3.74