LUONG DANG

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EDUCATION

San Francisco State University

San Francisco, CA

GPA: 3.64

Bachelor of Science in Computer Science

Relevant Coursework

Object-Oriented Programming, Algorithms, Software Design and Implementation, Database Systems, Full-Stack Web Development.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL

Frontend Frameworks/Libraries: React, Next.js, React Query, Framer Motion

Backend Frameworks: Django, FastAPI, Node.js

Databases: PostgreSQL, MySQL, Redis

AI/ML Libraries & Frameworks: PyTorch, Pandas, NumPy, Scikit-learn, NLTK, Transformers, Sentence-Transformers, Haystack-AI

AI/ML Models & Concepts: LLMs (Gemini, LLaMA, Flux.1 AI), Retrieval Augmented Generation (RAG), Embeddings, NLP, Clustering (HDBScan)

Cloud & DevOps: AWS, Supabase (PaaS), Docker, Git, REST APIs, Cloudinary (CDN), CI/CD Automation

EXPERIENCE

Operations Manager / Full-stack Developer

Oct 2024 - Present

Kim Tin Jewelry

Oakland, CA

- Led the end-to-end technical transformation of a family-owned retail business, significantly improving operational efficiency and enabling strategic growth.
- Built and deployed full-stack automation tools (Python, TypeScript, PostgreSQL) for critical operations (accounting, inventory, CRM), cutting manual workload by 70%.
- Developed custom applications to optimize inventory management and vendor interactions, directly impacting supply chain efficiency.
- Launched data-driven digital marketing campaigns using social media and AI (Flux.1) to demonstrably grow the customer base.
- Designed and implemented a personalized customer loyalty system to enhance retention.
- Applied software engineering principles to modernize backend systems and contribute technical insights crucial for a successful business exit strategy.

Insurance Agent (Sales)

Apr 2022 – Sep 2024

AAA – The Auto Club of Southern California

Costa Mesa, CA

- Top 3% (peaked at #1 of 255 in Jan-Feb 2024) insurance agent (Personal Lines & Life) leveraged Computer Science expertise to manage the full sales cycle (lead gen, sales, service, retention) and self-underwrite tailored policies under supervision (avg 100 percent accuracy.)
- Transitioning directly from Bachelor's program, played a key role in the Salesforce CRM integration by applying systems knowledge to provide actionable user feedback, improving workflow design and team adoption.
- Demonstrated strong problem-solving and initiative by identifying and resolving process inefficiencies, contributing directly to team performance (Team of the Year Regional).
- Utilized data analysis and systems thinking (rooted in CS background) to systematically optimize sales processes, analyzed performance data to pinpoint key growth drivers, leading to strategies resulting in Top 3% national producer ranking (Diamond Club) and multiple performance awards.

PROJECTS

NewsReader-Ultimate (Part 2 of Scraper-Ultimate) | Python, Google-GenAl, Haystack-RAG, PostgreSQL

Apr 2025 – Present

- Developed a scalable Python pipeline automating news analysis from ingestion to reporting; features include LLM-based preprocessing (summarization, embedding, clustering) and integration with a custom RAG system.
- Designed and executed an ETL process: extracted articles from Scraper-Ultimate API, transformed them using local llms and Gemini, and loaded structured results into a PostgreSQL database.
- Designed a RAG architecture to retrieve historical articles, entities, and events, enhancing the context and insights of daily reports leveraging Haystack framework.
- Applied prompt engineering techniques with Google's Gemini 2.5 Pro and its large context window (1 million tokens or 10 small novels) within the RAG pipeline to generate comprehensive daily reports, encompassing recaps, interpretations, patterns, and opinions.

Scraper-Ultimate | Python, FastAPI, PostgreSQL, Docker

Mar 2025 - Apr 2025

- Developed a robust web scraping pipeline in Python, utilizing libraries such as Playwright and Scrapling to extract structured data from diverse news sources.
- Implemented advanced anti-detection techniques, including browser fingerprint randomization, HTTP request customization, and adaptive retry mechanisms, to overcome anti-bot protections.
- Designed the solution to simulate human interaction patterns, effectively bypassing complex security measures such as CAPTCHAs and dynamic overlays, ensuring high-quality data extraction.

House of Iris | Next.js, React, Typescript, TailwindCSS, Supabase Postgres

Dec 2024 - Present

- Built and deployed a full-stack application using Next.js/React/TypeScript, demonstrating proficiency in component architecture, state management, and API integration.
- Implemented optimized image delivery by integrating the Cloudinary API for transformations and efficient loading.
- Created a digital love letter system using Supabase Postgres for CRUD operations, enabling persistent storage and retrieval of user-generated content
- Implemented a functional calendar component with scheduling capabilities, managing React state effectively and utilizing EmailJS to send automated confirmation and reminder emails.
- Designed a reward mechanic with Framer Motion, incorporating a Gacha system to gamify the user experience and provide incentives.