Huy Phan

Portfolio | LinkedIn | GitHub

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PROFESSIONAL EXPERIENCE

Freelance Software Engineer — Boston, MA
Aug 2023 - Present
- Developed a SaaS business software tool enabling efficient order management, providing real-time analytics resulting in a 50% reduction in order processing time, a 70% decrease in data entry errors, a 20% reduction in operational costs
- Implemented a serverless notification system that delivers digital receipts and order-completion alerts via Twilio SMS, improving customer pickup times by 60% and increasing client satisfaction by 50%
- Launched a modern, SEO-optimized business website with responsive UI and Google Analytics integration, increasing online visibility and customer engagement by 90%

Natixis Investment Managers — Boston, MA
Software Engineer Intern — *Jun 2022 - Sep 2022*
- Created a centralized full-stack web application with complete documentation that reduced a 22-step manager reporting process to a single click, cutting reporting time from 45 minutes to 10 minutes
- Collaborated with data engineering team to build a Python automation script for downstream data validation in an agile environment, streamlining ETL pipelines and improving load efficiency by 50%
- Developed an automated daily aggregation tool that pulled data from 15 major financial journals and newspapers, slashing research time from 30 minutes to under 5 seconds and enabling faster research and investment insights
- Delivered capstone presentation on ESG investment impacts to the CEO, 20 senior leaders, and 100+ employees, providing actionable recommendations that shaped the firm's future ESG strategy

PERSONAL PROJECTS

Kafka Logging Pipeline
Tools: Kafka, Docker, Lambda, PostgreSQL, Python
- Engineered a containerized data pipeline using AWS Lambda, Kafka, and PostgreSQL to ingest, process, and store 10,000+ Twilio messaging logs, transforming raw data into structured records for business performance analysis
- Automated the aggregation of messaging logs and generated time-series metrics using Matplotlib, enabling clear visualization of customer engagement trends on a weekly and monthly basis

Discrete Event Simulator
Tools: Go
- Designed and implemented a flexible discrete event simulation system in Go, capable of supporting any number of processors and various real-world systems such as gas stations or network traffic
- Integrated probabilistic repair times using a normal distribution with a small standard deviation to simulate realistic failure and repair events, enhancing system accuracy through randomness
- Optimized concurrent event processing with goroutines and channels, reducing average latency by 30% and improving overall simulation efficiency

Full Stack Spending Analyzer
Tools: Express, React, NodeJS, Firestore, NextJS, Plaid, Vercel
- Integrated Plaid's transaction service and OAuth flow to securely fetch user's transaction data and built a pipeline moving banking data to Firestore
- Created paginated tables and interactive charts with React and Chakra UI to display spending categories, helping users analyze habits and identify cost-saving opportunities

TECHNICAL SKILLS

Programming Languages: Python, Java, C, JavaScript, HTML/CSS, SQL
Frameworks & Libraries: React, Next.js, Node.js, Express.js, Flask, Material-UI, Chakra UI
AI Agents & Tools: OpenAI Codex, OpenClaw
Cloud Platforms: AWS, GCP, Firebase, Vercel, Netlify, Cloudflare
DevOps & Tools: Git, GitHub Actions, Docker, Linux, pytest, Jest, Jira, RESTful APIs, LaTeX
Methodologies & Concepts: Unit Testing, UI/UX Design, OOP, SDLC, Data Visualization, Agile

EDUCATION

Boston University
Bachelor of Arts: Computer Science, GPA: 3.80/4.00
- **Coursework:** Artificial Intelligence, Software Engineering, Full Stack Development (MERN), Computer Systems, Database Management Systems, Web Development, Algorithm Design + Analysis, Combinatoric Structures, NLP