

Gia Thuan Vu

SOFTWARE ENGINEER · FULLSTACK ENGINEER · MACHINE LEARNING ENTHUSIAST

✉ vugiathuan123@gmail.com | 🏠 capthuan.dev | 📧 giathuan123 | 🌐 giathuanvu123

Summary

Fullstack software engineer with a strong background in computer science and optimization specializing in web technologies and a solid foundation in deep learning and training neural networks. Adept at developing and delivering robust software solutions and an excellent team-player equip with excellent communication skills.

Education

University of California, Riverside

Riverside, CA

M.SC IN COMPUTER SCIENCE

Jan, 2023 - Apr, 2024

GPA: 3.80

Relevant Coursework: Principle of Distributed Computing Advance Software Testing & Analysis Data Mining Techniques Machine Learning
Advance Algorithms Compiler Construction Computer Security Parallel Algorithms

University of California, Riverside

Riverside, CA

B.SC IN COMPUTER SCIENCE

Aug, 2020 - May, 2022

GPA: 3.95

Relevant Coursework: Big Data Management System Concurrent Programming & Parrallel System Data Structure & Algorithm
Compiler Design

Honors & Scholarship: Magma Cum Laude, UCR Transfer Scholarship

Skills

Programming Languages

🔗 C++ 🔗 C 🐍 Python ☕ Java 🇯🇸 Javascript 🇹🇸 Typescript 🇬🇴 Go 🦀 Rust

Front-End

🌐 HTML 🎨 CSS 📦 Bootstrap 🍷 Sass ⚛️ ReactJS 🍷 ExpressJS 🌙 JQuery 🌀 TailwindCSS

Back-End

📦 NodeJS 🍸 Django 🍷 Flask 🏗️ PrismaJS 🔄 RemixJS 🗄️ PostgreSQL 📡 GraphQL

Data Science

📊 Pandas 🐘 Hadoop 📦 Numpy 🔥 Pytorch

DevOps

🐙 Github 🔑 Git 🔑 SSH 🐙 Puppeteer 🧪 Pytest 🐳 Docker 🐧 Linux 🌐 Heroku 🏠 Kubernetes
🐙 AWS 🐳 GCP 🐙 Terraform

Work Experience

Fullstack Engineer

A2ESHIP

Oct, 2022 - Present

A2EShip is an up-and-coming logistics company seeking to integrate their shipping service with Shopify's carrier service API and develop their Shopify online marketplace. I was responsible for developing their online marketplace and integrating their service with Shopify's carrier service API.

- Spearheaded the redesign and development of a responsive front-end utilizing Shopify Liquid Templates, Bootstrap, resulting in a seamless user experience across mobile and desktop devices; increased mobile conversion rate by 63%.
- Implemented robust data validation with ZodJS schema validation library.
- Developed A2EShip admin portal using Remix.js, a full-stack React framework, to deliver dynamic and interactive user experiences.
- Deployed and maintained a high-performance API endpoint on Heroku, ensuring reliable service.
- Conducted thorough testing, including unit testing and integration testing, to validate the functionality and reliability of the shipping service API, ensuring smooth operation under various scenarios.

Fullstack Engineer

KYHOA GOLF

Jan, 2022 - Oct, 2022

Kyhoa Golf is a well-established golf club management company looking to revitalize their online presence and customer management system. I oversaw their website redesign and development, working closely with the media team to understand their needs and elevate pain points.

- Collaborated with Kyhoa Media team to reorganize and optimize Kyhoa website to create a modern web application using Bootstrap resulting in an increase in web traffic by 50%.
- Utilized Django web framework to optimize Kyhoa website backend resulting in a 300% decrease in initial landing page load time.
- Employed WagtailCMS framework to streamline content management for Kyhoa Media team with a feature-rich content management system; increased media team productivity and accelerated content delivery by over 200%.
- Designed and implemented Kyhoa customer management system with an automated email service improving overall customer management and outreach.
- Implemented AWS S3 to store and manage static assets such as images, videos, and documents, reducing server load and improving website performance.

CS100 Course Grader

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Riverside, CA

Oct, 2020 - Jun, 2021

CS100 is the software construction course at UCR. It focuses on the development and construction of software products, including, design patterns, implementation strategies and documentation.

- Assisted in grading assignments, exams, and other course-related materials for CS100 Software Construction.
- Provided constructive feedback to students to aid in their understanding and improvement of design patterns and implementation strategies.
- Collaborated with course instructors to maintain grading standards and consistency.
- Contributed to the overall success and efficiency of the course by fulfilling grading responsibilities in a timely and accurate manner.

University Projects

OptTensor



AUTOGRAD ENGINE FOR NEURAL NETWORK

Oct, 2023 - Dec, 2023

- Architected an autograd engine leveraging Numpy, delivering prediction accuracy within 2% of PyTorch Tensors.
- Engineered a Python-based implementation incorporating advanced mathematical concepts, optimizing gradient computation and achieving a 50x improvement in performance compared to the initial naive approach.
- Managed a 5-member team to analyze initial naive approach and overcome significant system bottle necks.

ExtraMile Website



ACCIDENT DATA CRUD APP

Jan, 2022 - May, 2022

- Led a 5-member team to developed a CRUD web application to visualize over 2 million data points of car accidents data.
- Architected a responsive ReactJS frontend, leveraging reusable components and state management techniques; improved page load time by 30%.
- Data wrangled 5Gb of raw data to 300Mb of compressed data to reduce load on server.
- Implemented a custom multi-index in-memory cache in javascript using dictionaries to ensure data accuracy and consistency improving initial load time by over 6x.