

# Gia Thuan Vu

SOFTWARE ENGINEER · FULLSTACK ENGINEER · MACHINE LEARNING ENTHUSIAST

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## 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, 2023 - 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, 2023

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

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### 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.