

Kaushal Marimuthu

650-250-9912 | kaushal2m2apply@gmail.com | kaushalmarimuthu.com | linkedin.com/in/kaushal-marimuthu

EDUCATION

The University of California at Davis

B.S. Computer Science and Engineering, B.S Statistics, GPA: 3.96/4.0

Grad: June 2026

Davis, CA

EXPERIENCE

Software Engineer Intern

Deloitte

June 2024 – Aug 2024

Sacramento, CA

- Built AI tool using Python to automate client data parsing into spreadsheet/email, utilized by 1000+ employees.
- Developed pipeline for employer/industry info on government benefits dashboard, allowing 8 benefits programs to be supported.
- Presented a PoC for on-prem to AWS migration for a 16M user product, projected to reduce latency by 40% with edge compute and cut TCO by 12%.

Undergraduate ML Researcher

UC Davis Center for Mind and Brain

April 2024 – Present

Davis, CA

- Conducted research using 150+ fMRI brain scans to optimize CNN design for music-stimulated brain modeling.
- Developed a generative music model using transformers, trained on 2000+ songs.
- Improved genre classification accuracy by 15% with CNN models built using Emergent software and Go.

Software Engineer Intern

Brain Racers (startup)

July 2023 — Sept 2023

San Francisco, CA

- Aggregated data from five legacy SQL databases into a unified system, reducing database queries by 80% and improving API response times by 25%.
- Created 3 API endpoints integrated with 3 modular components, accelerating subsequent frontend tasks by 50%..

Data Analyst Intern

DigitalMain (startup)

June 2022 — Aug 2022

Sunnyvale, CA

- Created ETL pipeline automating extraction and ML analysis of 15,000+ data points from 6 cybersecurity forums, increasing data throughput by 4x.

LEADERSHIP & INVOLVEMENT

Software Developer & Project Manager

CodeLab

Oct 2023 – Present

Davis, CA

- Built 10+ interactive components and consolidated 3 product iterations into a unified dashboard for BillionMinds.
- Aggregated data from 4 APIs into a MongoDB database, reducing data loading latency by 50%.
- Managed a team for 16 weeks to build video summarizing software using TypeScript, Node.js and Google Gemini.

Software Engineering Director

Davis Quant Collective

July 2023 – Dec 2023

Davis, CA

- Incorporated research from 5 articles into stock portfolio analyzer, boosting risk prediction accuracy by 15%.
- Developed a Python trading bot, achieving a 5% average annual ROI on historical and live markets.

PROJECTS

Virtual Tour Guide | React, Node.js, OpenAI

July 2023 – Nov 2023

- Developed an AI-powered tour guide, providing users with real-time, location-based info in a chatbot interface.
- Integrated MongoDB for account management and travel location storage, creating ability to support more users.

TomatoClassify | Python, Tensorflow, Flask, Numpy

May 2023 – Sep 2023

- Built a CNN model with TensorFlow to classify tomato plant diseases, achieving 93% accuracy on 16,000 images.
- Reimplemented key machine learning models from scratch to deepen understanding of learning algorithms.

TECHNICAL SKILLS

Languages: Java, C/C++, Python, SQL (postgres), JavaScript, HTML/CSS

Frameworks: React, Node, Next, Flask, Spring, Redux

Tools: MongoDB, Git, Docker, Selenium, Tensorflow, PyTorch, HuggingFace, OpenAI, Gemini