

Catherine Truong

📍 Temecula, CA ✉ catherinedaitruong@gmail.com ☎ (951) 391-9835 🌐 Portfolio Website in catherinedaitruong

Education

University of California, Riverside

Sept 2021 – June 2025

Bachelor of Science in Computer Engineering

Coursework: AI Algorithms, Database Management Systems, Data Structures & Algorithms, Digital & Analog Signals, Discrete Structures, Electronic Circuits, Embedded & Real-Time Systems, Engineering Analysis & Design, GPU Computing & Programming (CUDA), Integration Design, Logic Design, Operating Systems, Software Construction

Experience

First American Financial

Santa Ana, CA

Full-Stack Engineering Intern (Part-Time)

Sept. 2024 – June 2025

- Upgrading **NuGet** dependencies and platform to **.NET 9.0**, ensuring compatibility with new features, optimizing existing code, and improving overall system performance
- Updated 3 unique **GitHub Pages** platforms to include documentation using **MkDocs**
- Enhanced an application for an automatic generation of update/release notes information found in Jira tickets through pipeline streamlining and various code implementations in preparation for domain inheritance

Backend Software Engineering Intern (Full-Time)

Jun. 2024 – Aug. 2024

- Curated usage and optimization of AWS CloudWatch using Python to create an AWS Lambda function automated by EventBridge to **reduce costs by 78%** and the number of **unused log groups by 88%**
- Designed a filter to determine whether the log groups are necessary within 3 sec. maximum per log group
- Exported 4 different JSON files to an S3 bucket which kept track of **600+ updated log groups** despite success or failure to track the log groups' details dating back to 4 years' worth of unused data
- Automated the HTTPS-conditional security compliance of log group policies to **92%** of total S3 buckets

UCR Information & Technology Solutions

Riverside, CA

Student Information Systems Intern (Part-Time)

Apr. 2023 – Sept. 2024

- Managed and created queries through **CRM databases** for students and academic advisors using SQL
- Performed **2+** daily tests using an unreleased web application to optimize runtime and performance
- Developed **20+** internal/public facing documentation and updating existing documentation using HTML

Projects

📱 CamJam

- Implemented user authentication with **Firebase** to securely manage login and signup flows, resulting in a 100% success rate for persistent session handling across devices
- Built a custom in-app camera and photo upload system using **React Native** and **Firebase Storage** to streamline real-time event sharing, increasing photo upload speed and reliability
- Refactored app architecture to centralize authentication state, reducing redundant logic and cutting onboarding time for new contributors by over 30%

📱 Smart Glasses (Intended for ADA)

- Designed a pair of glasses with an **OLED screen** that displays output text via Raspberry Pi and Python
- Implemented **KNN algorithm** to determine the closest color match to live feed integrated camera
- Adjusted camera parameters based on the 3 colors of calibration images taken during camera setup
- Developed a learning model that can determine more complex colors via color sampling and charting using a .csv

📱 SteamDB, Steam Dashboard

- Designed a UI using **Figma** to envision product design, usability, and UX through HTML and CSS
- Deployed sorting filters using Python to have up to 4 queries of relevant data to match user input
- Improved cuDF query performance runtime for less than 1 second while sorting through 50,000+ games

Skills

Management: Azure, Confluence, Jira, Microsoft Tools, Miro, ServiceNow, Visual Studio

Hardware/Software: Arduino, AutoCAD, AWS, Circuit Board Design, Docker, Git, Pytorch, TensorFlow

Programming Languages: C++, CSS, HTML, Java, JavaScript, MATLAB, **Python**, React, Swift, SQL