Tomas Oh

EDUCATION

California State University, Fullerton

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 3.95

Relevant Coursework: Data Structures, Software Engineering, Algorithm Engineering, File Structures and Databases

EXPERIENCE

Data Science and AI/Robotics Research Assistant | Project ACCESS at CSUF

June 2024 - Aug 2024

Expected Graduation: December 2025

- Completed a ten-week research program, attended data science and AI/robotics lectures, and collaborated with a team of three to build projects addressing emerging social justice issues
- Implemented fall-detection and emergency alerting functionalities for a **Raspberry PI** AI Vision Robot Car, utilizing YOLO v8 pose-detection model, SQLite to store owner information, and SMTB for text messaging
- Developed a machine learning model with NumPy, Pandas, and scikit-learn to predict salaries in the technology industry based on demographic data, using 70,000+ responses from the Stack Overflow 2022 Developer Survey

Supplemental Instructor | California State University, Fullerton

Jan 2024 – Present

- Conducted weekly sessions to reinforce students' understanding of multivariable and vector calculus concepts
- Integrated interactive and collaborative study techniques to help improve problem-solving skills for complex topics
- Fostered active student participation and peer discussion, resulting in a 10% average grade increase

PROJECTS

Fullyhacks | Next.js, ReactJS, TypeScript, TailwindCSS, MongoDB, Prisma

• acmcsufoss/fullyhacks

- Collaborated with a team of six to build the website for Fullyhacks, the largest year-round hackathon at California State University, Fullerton with 400+ applicants
- Delegated tasks to teammates, documented bugs and feature requests, and actively contributed to code reviews
- Implemented UI components across multiple pages and refactored the codebase for a more consistent architecture

vimaroo | SvelteKit, TypeScript, TailwindCSS, Supabase, Monaco, Vim

• vimaroo.vercel.app

- Built a web application that allows users to practice Vim keybindings, featuring interactive, motion-focused tests
- Used Supabase and PostgreSQL for authentication, user management, and real-time user statistics storage
- Added editor customization settings integrated with the Monaco code editor (word wrap and font size)

go-blueprint | Go, Cobra CLI

• Melkeydev/go-blueprint

- Contributed to an open source CLI tool that automatically spins up Go projects (2.6k+ GitHub stars)
- Implemented a flag that allows users to opt out from creating a git repository, resolving 16% of reported bugs

char-roles-bot | Deno, TypeScript, Discord REST API

tomasohCHOM/char-roles-bot

- Developed a Discord application to automatically assign/remove roles in a server via slash commands
- Utilized the Discord REST API to handle 80+ roles for a server with 400 members

SKILLS

Programming: C, C++, Python, TypeScript, JavaScript, Go, Java, Rust, HTML/CSS, SQL

Technologies: Next.js, ReactJS, Node.js, Svelte/SvelteKit, FastAPI, NumPy, Pandas, scikit-learn, TailwindCSS

Databases/Services: PostgreSQL, SQLite, MongoDB, Supabase, Firebase, AWS

Tools: Git, Vim/Neovim, Jupyter Notebook, Postman, MS Office, Figma

Extracurriculars

Open Source Software Team Lead, Officer | Association for Computing Machinery (ACM) Jan 2023 - Present

- Led a branch of the largest computer science club at California State University, Fullerton (1000+ members)
- Maintained the club's **Open Source Software** initiative and organization, tailoring workshop and project ideas toward Open Source development and its impact in the engineering space
- Collaborated with fellow student developers to build software tools with positive impacts on the community