Tomas Oh

EDUCATION

California State University, Fullerton

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 3.95

Expected Graduation: December 2025

Relevant Coursework: Data Structures, Software Engineering, Operating Systems, Web Back-End Engineering

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, Linux, Vim/Neovim, tmux, Jupyter Notebook, Postman, MS Office, Figma

EXPERIENCE

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

June 2024 – Aug 2024

- 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 participation and peer discussion with 20+ students, resulting in a 10% average grade increase

Full-Stack Web Developer Officer | FullyHacks 2024

Sep 2023 – Feb 2024

- Collaborated with a team of six to build the website for Fullyhacks, the largest **year-round hackathon** at California State University, Fullerton, attracting **400+** applicants and **10** sponsors
- Implemented multiple pages and refactored Next.js and TypeScript codebase for a more consistent architecture
- Delegated tasks to teammates, documented bugs and feature requests, and actively contributed to code reviews

PROJECTS

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 spins up Go projects with popular frameworks (2.6k+ GitHub stars)
- Implemented a flag that allows users to opt out from creating a git repository, resolving 16% of reported bugs

aoc-dailies | Deno, TypeScript, Discord REST, Advent Of Code

tomasohCHOM/aoc-dailies

- Created a Discord webhook to send Advent Of Code daily challenges to a server with 2000+ members
- Set up a cron job to scrape challenge information and links, and deliver them as Discord embed messages

LEADERSHIP

 ${\bf Open \ Source \ Software \ Team \ Lead} \ | \ {\it Association \ for \ Computing \ Machinery \ (ACM)}$

Aug 2024 – Present

- Led an open source software initiative, consisting of 60+ student contributors and 20+ maintained projects
- Collaborated with fellow members to build full-stack, back-end, and infrastructure solutions that benefited the community, exposing students to multiple languages, technologies, and design patterns
- Hosted weekly workshops centered around open source development and its impact in the engineering space

Web Development Team Lead | FullyHacks 2025

July 2024 - Present

• Responsible for leading FullyHacks 2025 website development in Next.js, TypeScript, TailwindCSS, and MongoDB