Alfredo Chavez

EDUCATION

Mission Economic Development Agency
Certificate in Google IT Support Professional & Google AI Essentials — **Fall 2024**
University of California, Berkeley
B.A. in Electrical Engineering and Computer Science — **Spring 2023**
Certification in Engineering Design and Design Innovation — **Spring 2023**

HIGHLIGHTED PROJECTS

Information Technology Technician Trainee — **Sep – Dec 2024**
San Francisco MEDA Mission IT Techies Program — San Francisco, CA
- Mastered core IT concepts, including hardware systems diagnostics, maintenance, networking fundamentals, and customer support principles, through an extensive curriculum and expert-led lessons
- Refined technical and interpersonal skills by practicing IT support and delivering troubleshooting solutions in simulated environments

CS152: Computer Architecture and Engineering — **Jan – May 2023**
UC Berkeley Student Course — Berkeley, CA
- Utilized Chisel and the Chipyard Framework to simulate a full-featured RISC-V64 SOC in order to design and implement different out-of-order and vector-style processor designs

EECS 120: Signals and Systems — **Jan – May 2023**
UC Berkeley Student Course — Berkeley, CA
- Designed and implemented different LTI systems composed of multiple submodular LTI filters as a solution methodology for existing issues
- Integrated different filters to manipulate, modulate, and transform both discrete and continuous periodic and non-periodic signals

Payload It Forward — **Aug – Dec 2022**
EECS 149: Introduction to Embedded Systems - UC Berkeley — Berkeley, CA
- Formulated and built a testbed prototype for measuring performance on opportunistic networks with a team of 3 students as a foundation for future research regarding backhauling data with data mules
- Employed BLE GATT, I2C protocols, and Lingua Franca, a real-time reactor language between low-level embedded devices, as a way to practice concurrent execution of time-sensitive events

Regulus: Secure File Sharing System — **Jan – May 2022**
CS161: Computer Security - UC Berkeley — Berkeley, CA
- Engineered and implemented a complete mock file sharing system with the capabilities to log on multiple users, store files, and share files with others in a secure method
- Leveraged different cryptographic libraries in the system to ensure secure transactions from potential attacks, encrypt stored data, and establish recovery protocols for corrupted data

SKILLS

Programming: Python, C, RISC-V, SQL, HTML, CSS, JS, Java, GO, C++, Arduino
Languages: Spanish, English, Beginner Mandarin
Experience: OOP, Soldering, Electrical Equipment, Hands-On Power Tools, 3D Printing
Design: Fusion 360, Figma, AutoCAD, Adobe Suite

WORK EXPERIENCE

Math Enrichment After-School Instructor/Teacher — **Sep 2024 – Present**
Mathnasium After-School Education — Alameda, CA
- Facilitated personalized math instruction for students from kindergarten to 12th grade, using proprietary methods to address individual learning needs and gaps
- Guided an average of 2-4 students per session, providing tailored support and corrections to ensure mastery of math concepts and enhance problem-solving skills

STEM After-School Instructor/Teacher — **Aug 2024 – Jan 2025**
Brains and Motion Education — Berkeley, CA
- Delivered engaging physics and engineering lessons through kinesthetic activities and interactive presentations, fostering hands-on learning
- Transformed coding instruction by transitioning from block coding to music-driven coding, culminating in interactive robotics and programmable robot activities