

Johnathon Zheng

510-666-5761 | johnathon@berkeley.edu | www.johnatho.nz | linkedin.com/in/johnathon-zheng

EDUCATION

University of California, Berkeley

B.A., Applied Mathematics; Minor in Computer Science

Berkeley, CA

Aug. 2025 – May 2027

Skyline College

A.S., Computer Science & Mathematics

San Bruno, CA

Aug. 2023 – May 2025

Coursework: Artificial Intelligence, Discrete Math, Data Structures & Algorithms, Data Science, Databases, Computer Architecture, Ordinary Differential Equations, Linear Algebra

WORK EXPERIENCE

Peer Tutor

Skyline College

Jan 2025 – May 2025

San Bruno, CA

- Supported Skyline College students in Calculus I–III through weekly 1:1 and drop-in tutoring sessions.
- Identified and helped students develop needed skills for success

Teaching Assistant

KTBYTE Computer Science Academy

Jun, 2023 – Sep, 2023

Remote

- Conducted regular 1:1 office hours to offer support with Java related concepts and problem sets.
- Adapted teaching methods to accommodate students of varying ages and backgrounds.

RELEVANT ACADEMIC EXPERIENCE

Raspberry Pi Trash Detection System | YOLOv8, ONNX, Raspberry Pi 5, Arduino

Jan 2025 – May 2025

- Designed an embedded computer vision system to classify and sort trash in real time using YOLOv8.
- Converted the PyTorch model to ONNX for lightweight inference; optimized for edge performance.
- Integrated an Arduino-controlled motor to actuate sorting mechanism based on classification output.
- Prepared datasets from Kaggle and Roboflow; implemented preprocessing pipelines to improve model accuracy.

Home Server / Homelab | Proxmox, Docker, Ubuntu Linux, Networking

May 2023 – Present

- Managed Proxmox cluster across 5 nodes, running 5+ VMs/containers for storage, media, and testing.
- Improved reliability by configuring ZFS pools with redundant disks, preventing data loss during test failures.
- Ran a TrueNAS SCALE VM for centralized storage, SMB sharing, and automated backups.
- Enabled secure remote access and cluster management using Tailscale.

Timely Track @ SF Hacks | Python, Flask

April 2024

- Developed a scheduling assistant using Google Maps APIs to ensure timely arrival at appointments.
- Integrated OpenAI's APIs to discern whether meetings could be substituted with emails.
- Collaborated with 3 teammates to build a Flask-based scheduling app in 24 hours.
- Coordinated frontend implementation, utilizing HTML/CSS with Flask's Jinja2 for dynamic content.

Robotics Club Programmer | WPILib, Git, Java

Aug 2019 – May 2023

- Programmed robot subsystems in Java; deployed code updates that enabled competition readiness under strict deadlines.
- Mentored 5 new members on Java/Git basics to prepare them for competition season.
- Deployed critical robot controller update during competition.
- Experimented on implementing an autonomous balancing routine by filtering gyroscope sensor data.

Staff Volunteer @ UC Berkeley Open Computing Facility

Sept 2025 – Present

- Contributed documentation improvements to OCF open-source repo, merged PR adopted by 500+ users.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, Bash

Frameworks: React, Node.js, Flask, FastAPI

Developer Tools: Git, Docker, Proxmox, Linux