Jaysa Garcia

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EDUCATION

University of California, Berkeley

Berkeley, CA

B.A. in Computer Science, B.A in English – GPA: 3.76/4.0

Aug. 2022 – May 2026

• Relevant Coursework: Data Structures & Algorithms, Linux Systems Administration, Operating Systems and System Programming, Database Systems, Computer Architecture, Programming Languages and Compilers, Computer Security, Discrete Mathematics and Probability Theory

EXPERIENCE

Open Computing Facility - ocf.berkeley.edu

August 2022 – Present

General Manager, Sysadmin DeCal Facilitator

- Led a student-run class on Linux Systems Administration for 100+ students, created new website in Hugo hosted on a Proxmox hypervisor within a NixOS VM: ocf.io/decal & github.com/ocf/hugo-decal-web
- Implemented CI/CD system for documentation and decal websites: <u>bestdocs.ocf.io</u> & github.com/ocf/mkdocs
- Implemented bridged communications server over Matrix, IRC, and Discord declaratively in Nix
- Maintained fleet of 29 NixOS desktops, while migrating server configs from Puppet to Nix: github.com/ocf/nix
- Provide technical assistance for deployment, package management, and dependencies for other campus organizations who host apps and sites on our servers

Committee On Student Fees

Mar. 2023 - Present

Chair

- Designed front-end for fee visualization website with React and Next.js, which provides an informative breakdown of student fee allocation across various university departments, improving fee transparency for students
- Developed back-end that uses SQL and Google Visualization API to update the data visualization website in real time with Google Sheets data provided by non-technical staff
- Writing annual reports using in-depth audits and interviews that summarize the financial status of various university branches: csf.berkeley.edu/publications
- Set up CI/CD to automate deployment, used Docker and NGINX to serve site on self-hosted hardware

Blackhawk Network

May 2025 - August 2025

Platform Engineering Intern

- Created plugin for Jenkins CI/CD system which generated AI suggestions for debugging build & deploy errors
- Wrote parallelized, multi-threaded script tracking metrics for build failures and different error types

PROJECTS

jaysa.net (My Homelab) | NGINX, Docker, Google Cloud Platform

December 2023 – Present

- Built and maintained a Linux server from repurposed hardware to act as a containerization platform to host a variety of services for work and personal use
- Automated creation of reproducible public video game servers
- Used a VPN and NGINX with GCP to tunnel traffic back to my personal server behind NAT

PintOS | C

Spring 2025

- Implemented basic syscall functionality for process control and file operation, and argument passing for user programs
- Added support for multithreaded programs with a thread priority scheduler and user threads
- Wrote file system features such as extensible files, directory trees and directory manipulation syscalls, and a buffer cache to speed up disk accesses

WordNet | Java

Fall 2023

- · Wrote back-end in Java for browser-based tool made to view historical popularity of individual words
- Deployed a web server to handle user input and requests

TECHNICAL SKILLS

Languages: Python, Java, Bash, C, Go, SQL, JavaScript, HTML/CSS, OCaml, RISC-V **Developer Tools**: Nix, Docker, Git, NGINX, Puppet, Google Cloud Platform, Github, Logisim

Libraries: React, Recharts, Chart.js