

Nikhil Jha

✉ mail@nikhiljha.com | 📍 Berkeley, CA | 🌐 nikhiljha.com

Education

University of California, Berkeley

BS IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Berkeley, CA

Jun 2020 – May 2024

- SU2020 **CS61A**, Structure and Interpretation of Computer Programs
- FA2020 **CS61B**, Data Structures
- SP2021 **CS61C**, Great Ideas in Computer Architecture (Machine Structures) - **top 10% of class**
- FA2021 **CS170**, Efficient Algorithms and Intractable Problems

Experience

Peloton Interactive, Inc.

ANDROID FIRMWARE ENGINEERING INTERN

New York, NY

Jun 2021 – Aug 2021

- implemented binary/artifact signing workflow with AWS
- deployed new services on AWS EC2 with terraform

Open Computing Facility at UC Berkeley

SITE MANAGER

Berkeley, CA

Jul 2020 – Present

- technical lead of the organization - serving PB-scale amounts of data per year
- built a bare metal Kubernetes cluster from scratch
- migrated 40+ services onto the new Kubernetes cluster
- automated dependency updates, improved ability to rollback

AutoLAB (UC Berkeley Automation Lab)

STUDENT RESEARCHER & SYSADMIN

Berkeley, CA

Jan 2021 – Present

- maintaining GPU HPC services for AI/ML researchers
- wrote clean declarative devops configuration for distributed machines

Projects

Mycelium Kubernetes Operator

A KUBERNETES OPERATOR TO HOST MINECRAFT SERVERS WITH DYNAMIC PROXY CONFIGURATION, MONITORING, AND REDUNDANCY.

Kubernetes, Rust, Kotlin

mycelium.njha.dev

Fedora for PinePhone

A PATCHED KERNEL AND SYSTEM IMAGE FOR RUNNING FEDORA LINUX ON A PINEPHONE.

Linux

github/nikhiljha/pp-fedora-sdsetup

ocf/kubernetes

MODERN GIT BASED KUBERNETES INFRASTRUCTURE-AS-CODE DEPLOYMENT FOR THE OPEN COMPUTING FACILITY.

Python 3, ArgoCD, Cilium

github/ocf/kubernetes

Teaching

- SP2021 **Linux Sysadmin DeCal**, Lead facilitator for a course covering the basics of setting up and administering a production-quality Linux server environment.
- FA2021 **CS61C Course Staff**, Helping students with C, RISC-V Assembly, operating systems concepts, CPU design, and other course content.

DeCal Facilitator

Course Staff

Awards

- 2019 **USACO Platinum**, highest qualifying level for the USA Computing Olympiad
- 2016-19 **NEM Bounty**, ~\$200k in multiple awards for open source bug bounties and new ideas

USACO

NEM Foundation
Ltd.