

DAVID ZHU

davidzhu_sd@berkeley.edu • 858-371-8840 • linkedin.com/in/david-s-zhu

EDUCATION

University of California, Berkeley

B.S. Electrical Engineering and Computer Science

Graduation: May 2023

GPA: 3.83

EXPERIENCE

Roblox

May. 2022 - Aug. 2022

Software Engineer Intern | *Infrastructure*

San Mateo, CA

- Created Python script to auto-generate .tf files, condensing copy/paste boilerplate code by up to 8x
- Implemented GitOps automation with GitHub Actions workflows to catch unwanted infrastructure drift
- Allowed automatic service deployments using Terraform Enterprise, drastically reducing times for large deployments (1 week → 1 day) and freeing engineers from manual oversight
- Wrote a Hashicorp HCL module to setup Consul, Vault, and Nomad backends for Terraform workspaces

Verkada

Feb. 2022 - Apr. 2022

Software Engineer Intern | *Streaming*

San Mateo, CA

- Designed method of storing and retrieving HLS playlist segment information from the camera using Go
- Removed need for a 10TB AWS DynamoDB cloud index, reducing camera maintenance costs by 10%
- Completely removed historical playback failures due to missing stored video segments
- Deployed and monitored Python K8s services with ArgoCD, Datadog, Logz.io, Sentry.io, and Terraform

IDT U.S.

May. 2021 - Aug. 2021

Software Engineer Intern | *Infrastructure*

San Diego, CA

- Integrated software for adding microservice REST API request monitoring and metrics to Prometheus
- Automatically generated code templates for similarly structured services with Java + Apache Velocity
- Improved Jenkins CI/CD reliability by Dockerizing external dependencies using Testcontainers
- Followed Scrum/agile development methodologies through Jira, stand-ups, and GitLab

PROJECTS

Investment Portfolio Diversity Visualizer

- Created an application that displays a portfolio's security diversity using BlackRock's Aladdin API
- Won the BlackRock API Prize at Cal Hacks 6.0, the largest collegiate hackathon in the world
- Designed the application interface using Python and Jupyter Notebook

Extended Reality at Berkeley

- Built a 3D Unity environment inspired by military training courses for UC Berkeley's virtual reality club
- Wrote new scripts in C# for the teleportation of game objects, a critical feature of the experience
- Improved performance of existing scripts by caching calls to Unity's scripting API

AWARDS

Winner Cal Hacks 6.0 BlackRock API Prize

Oct. 2019

Winner Intuit Academic Scholarship

Aug. 2019

SKILLS

Languages Python, Java, C, Go, SQL

Tools Git, Linux, Bash, Github, Kubernetes, HashiStack, Datadog