

Harry Zhu

San Francisco, CA | harryzhu45@gmail.com | linkedin.com/in/harryjzhu | github.com/HarryZ10 | harryzhu.com

EDUCATION

George Fox University

Bachelor of Science in Computer Science

Graduated April 2024

Newberg, OR

Coursework: Ethical Hacking, Secure Software, Data Networking (TCP/IP suite, FTP, HTTP, UDP)

Activities: CodePath, ACM President, 2x CTF Medalist (Top 200), College Track, Gameheads

SKILLS

Languages: C# · Python · Java · JavaScript · TypeScript · Bash · C/C++ · SQL · PHP

Tools: React · NodeJS · NextJS · Redis · Docker · AWS · BigQuery · PostgreSQL

PROFESSIONAL EXPERIENCE

Software Engineering Contractor — Recidiviz

November 2024 – Present

- Engineered Python automation using SDLC principles to standardize 200+ BigQuery schema manifests across 20 state agencies, reducing per-file query processing time from to near-instant through local schema caching
- Created data transformation pipeline processing 200+ datetime fields across 45+ BigQuery tables, reducing processing time by 2.5x and accelerating data standardization efforts among all 12+ states

Software Engineer Intern — F5 Networks, Inc.

July 2024 – September 2024

- Performed root cause analysis on 100+ CI/CD pipelines creating a Bash program, reducing debug time by 70%
- Implemented automated debugging procedures and system documentation supporting 45+ developers
- Created technical documentation and led knowledge sharing sessions for crash analysis workflows

Software Engineer Intern — George Fox Communications Office

August 2021 – April 2024

- Engineered 20+ NodeJS and API-driven applications following full SDLC, reducing development cycles by 90%
- Developed a NodeJS and VueJS monitoring system powered by Docker, improving content review efficiency by 95%
- Optimized system performance for web applications serving 1000+ daily users using Google Lighthouse

Software Engineer Intern — Liminal Insights, Inc.

June 2023 – August 2023

- Developed Docker-driven feature flag tool in ReactJS for 7+ features, reducing configuration time by 90%
- Built pub/sub message queue system utilizing ZeroMQ, processing 50+ debug logs/minute for battery testing
- Implemented optimized Redis-based data flow achieving uptime for 100+ industrial control events from the PLC

Software Engineer Intern — Recidiviz

June 2022 – August 2022

- Led security vulnerability remediation eliminating 200+ mid-priority, urgent issues through automated scanning
- Architected API-driven security automation system using Python, achieving 95% efficiency in audit workflows
- Deployed 10 Google Cloud security controls with monitoring in accordance with CIS, reducing detection time by 40%

PROJECTS

Saving Corgon | teamdelta.itch.io/saving-corgon | Developed in 2023

Confined Indorms | gameheads.itch.io/confined-indorms | Developed in 2020

- Implemented C# scripts using event-driven architecture and singleton patterns for primary game controls, such as UI elements, animations, dialogue, music, and visual add-ons, which contributes to the games' mechanics and aesthetic

Ecological Simulation Models | CS 434 Parallel & Distributed Systems | Fall 2023

- Implemented a parallelized predator-prey model in C++ using POSIX threads to simulate ecological dynamics
- Extended the model using MPI for distributed memory systems in C, managing communication among 10+ nodes
- Developed a CUDA-based GPU acceleration model, achieving faster simulation times by leveraging GPUs