Harry Zhu

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

SKILLS

Languages: Python · Bash · Java · C# · JavaScript · TypeScript · PHP · C/C++ · Scala · SQL Frameworks: React · Node.js · Vue · NoSQL · Express · Tailwind · SciPy · NumPy · JUnit

EXPERIENCE

Software Engineer Intern

July 2024 – September 2024

F5 Networks

Seattle, WA

- Accelerated development process across multiple teams by building a CI/CD module that can investigate a crash from functional tests in 50+ staging and production environments using GDB and Bash within 8 minutes
- Conducted daily analysis of 5-10 CI/CD pipeline executions, leveraging **GDB** to examine crash dumps and aggregate stack traces and relevant source code from functional test logs into **Bugzilla**, an enterprise bug reporting software
- Leveraged courses to rapidly acquire Kubernetes and K3S proficiency, significantly advancing DevOps capabilities

Software Engineer Intern

August 2021 - April 2024

George Fox University Communications Office

Newberg, OR

- \bullet Engineered a monitoring tool using Vue and NodeJS, reducing manual verification of content accuracy by 95%
- Achieved a 90% reduction in manual build time for various tasks time down to 2-4 seconds by developing 20+ user-driven programs in NodeJS interacting with the content management system and various public web services
- \bullet Optimized branding by redesigning 100+ legacy pages trafficked by 1,000+ users with JavaScript and CSS
- Increased web accessibility by developing and A/B testing 50+ features in a collaborative, cross-functional team

Software Engineer Intern

June 2023 – August 2023

Liminal Insights, Inc.

Emeryville, CA

- Reduced product configuration time by 80% by building an app with a service-oriented architecture in Python
- Optimized battery cell testing process efficiency, offloading 50+ log messages/minute with ZeroMQ and pub/subs
- Stabilized uptime and data flow of 100+ OPC events, removing race conditions involving Redis subscriptions

Software Engineer Intern

June 2022 – August 2022

Recidiviz, Inc.

San Francisco, CA

- Built an access monitoring tool in Python, Docker, and GCP, reducing IAM audit time by 90% across 17 vendors
- Introduced over 10 new security controls and alerts in infrastructure services across 3 disparate cloud environments
- Resolved 200+ product and container vulnerabilities using CI/CD with CodeQL and Trivy for automated scans

Projects

Journex Career Blog (Blind Clone) | PHP, Digital Ocean | 70 hours | blog.harryzhu.com

- Designed 10+ React components and 10+ back-end RESTful APIs using PostgreSQL in Ubuntu Linux
- Implemented JWT APIs server-side and React Contexts and Hooks to manage user authentication and blog services

Pickabox - Hackathon Team Project | React, Express, Google Cloud | 45 hours | pickaboxdemo.netlify.app

- Won 2nd place in Best Design at Sacramento Hacks in 2021 using Cloud Run services for scalable APIs
- Designed and launched an app showcasing random Wikipedia articles to enhance user learning and exploration

TZ Medical ECG Medical Triage - Group Capstone Project | github.com/HarryZ10/ecg

- Extracted 8 domain features on over **34,000+** ECG events by developing standalone data processing and ETL scripts using **SciPy**, **Pandas**, **NumPy**, **Tensorflow**, and **Scikit-Learn** libraries
- Detected arrhythmia events close to 95% precision on a 70-80% confidence interval with Random Forest

EDUCATION

George Fox University

August 2020 - April 2024

Computer Science, Bachelor of Science

Newberg, OR

Coursework: Machine Learning, Operating Systems, Database Systems, Algorithms, Data Structures

Activities: CodePath Emerging Engineers Summit, ACM President & Technology Chair, College Track, Gameheads