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 · .NET · NoSQL · Express · Tailwind · SciPy · Kubernetes/K3S · JUnit

Tools: PostgreSQL · Docker · Kubernetes · CI/CD · AWS · Langchain · Azure · Linux · Git

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 **C** crash dumps and aggregate stack traces and source code from functional test logs into **Bugzilla**, an enterprise bug reporting software
- Expanded knowledge sharing by documenting project scope, deliverables, and milestones in **Jira** and **Confluence**
- Leveraged LinkedIn courses to rapidly acquire **Kubernetes** and container orchestration knowledge and skills

Software Engineer Intern   August 2021 – April 2024
George Fox University Communications Office   Newberg, OR
- 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
- 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 a **RESTful API** powered web app with a service-oriented architecture in **Python** and **NextJS** with **PostgreSQL**, using **Docker** for containerization and debugging
- 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) | **TypeScript**, **AWS**, **PHP** | 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

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**, **NumPy**, and **Scikit-Learn**, resulting in close **95%** precision on an **80%** confidence interval

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