# Harry Zhu

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# EDUCATION

## George Fox University

Graduated April 2024

Bachelor of Science in Computer Science

Newberg, OR

Coursework: Ethical Hacking, Secure Software, Cyber Defense, Data Networking

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

#### SKILLS

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

Tools: React NodeJS NextJS TailwindCSS Docker AWS BigQuery PostgreSQL

#### Professional Experience

## Engineering Contributor (Civic Tech) — Recidiviz

November 2024 – Present

• Retired 200+ SQL sensitive data queries by pre-fetching metadata cache using Python, achieving near-instant lookups and boosting developer productivity, with projected savings exceeding \$10-15K in BigQuery costs annually

# **Software Engineer Intern** — F5 Networks

July 2024 – September 2024

- Implemented automated debugging using Bash shell scripting in Docker containers to analyze 100+ CI/CD pipelines resulting in 70% faster crash analysis for 45+ developers on F5's core traffic management system
- Expanded knowledge sharing by creating documentation on crash analysis procedures, supporting 30+ developers
- Accelerated crash recovery time by 10% across teams by aggregating 5+ stack traces into bug reports per day

## **Software Engineer Intern** — University Communications Office

August 2021 – April 2024

- Engineered 20+ NodeJS programs to leverage CMS workflow APIs, reducing development cycles and time by 90%
- Streamlined content review time by 95% through an API-driven **VueJS** CMS monitoring system for  $4{,}000+$  pages
- Enhanced user experience for 1,000+ daily visitors through performance and design optimization of 100+ pages

#### **Software Engineer Intern** — Liminal Insights, Inc.

June 2023 – August 2023

- Reduced product configuration time by 90% by developing a Docker-driven feature flag tool in React for 7+ features
- Improved battery testing reliability by building a ZeroMQ message queue system processing 50+ debug logs/minute
- Achieved 95% uptime for 100+ industrial control events through Redis-driven data flow by removing race conditions

## Software Engineer Intern — Recidiviz

June 2022 – August 2022

- Eliminated 200+ vulnerabilities in the product platform through automated security scanning and remediation
- Built API-driven security account automation system handling 15+ annual departures using Docker and Python frameworks, driving 95% efficiency gain in audit workflows until replacement by enterprise SOC2 solution
- Deployed 10 security controls in Google Cloud, including log monitoring via Pub/Sub, Slack alert integrations, and PagerDuty incident response scripts, reducing mean time to detection (MTTD) by 40%

## Security Analyst Intern — Northwest Natural Energy, LLC

May 2021 - August 2021

- Enabled real-time tracking of 1000+ daily logins through Splunk dashboard implementation for threat detection
- Reduced team search time by 5+ hours weekly through overhaul of 100+ SharePoint files and incident plans

# PROJECTS

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

- Collaborated with 12 tech professionals to gather and translate business requirements into technical specifications
- 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 ~95% precision in identifying anomalous ECG data

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

- Won 2nd place in Best Design by building a web app used by 1K+ users to aggregate Wikipedia articles
- Designed and launched an app showcasing random Wikipedia articles to enhance user learning and exploration