Benson "Yubin" Shen

y343shen@uwaterloo.ca • github.com/shenbenson • linkedin.com/in/shenbenson • bensonshen.com

Education

University of Waterloo Sept 2020 – Apr 2025

Bachelor of Applied Science in Computer Engineering (3.74/4.0 GPA)

Relevant Courses: Systems Programming & Concurrency, Databases, Programming for Performance, Machine Learning

Skills

Languages	Python, JavaScript, TypeScript, Rust, C/C++, Java, Bash, SQL, PHP, HTML, CSS
Frameworks	Node.js, React, Express, Flask, Tailwind CSS, Bootstrap, OpenAPI, Bazel, Selenium, PyTorch
Tools	AWS, GCP, GitHub Actions, Docker, Kubernetes, Jenkins, Git, Linux, MongoDB, InfluxDB, Grafana

Experiences

BitGo – Software Engineering Intern Sept 2024 – Present

- Designed and implemented an automated API Changelog system using **TypeScript** and **GitHub Actions**, empowering **1,500+** institutional clients to track ongoing changes to the BitGo API. Projected to drive **$100,000+** in annual revenue through improved client satisfaction and retention.
- Developed and optimized an **OpenAPI** merger tool in **Rust**, achieving a **5x** performance improvement and enhancing reliability, saving the team **8 hours per week** in manual troubleshooting.
- Streamlined the API specification release process with **GitHub Actions**, enabling on-demand internal releases and reducing release time by **70%**, enhancing development efficiency.
- Delivered **30+** feature enhancements for the Developer Portal using **TypeScript**, **React**, **Docker**, and **Kubernetes**, including a **90%** reduction in downtime and improvements to usability and functionality.

Arctic Wolf – Full Stack Developer Intern Jan 2024 – Apr 2024

- Developed a high-performance backend server using **Python**, **Flask**, and **Bazel**, integrating with **7** Arctic Wolf APIs. Achieving a **19%** improvement in data retrieval time, streamlining workflows for the security team.
- Led a large-scale code refactoring initiative, improving **8,000+** lines of **Python** and **TypeScript** code to enhance performance, maintainability, and reduce error rates by **30%**.
- Built an internal workflow automation tool using **TypeScript** and **React**, enabling sales teams to instantly generate data-rich and client-ready PowerPoint presentations, eliminating **2+ hours** of manual work per client.
- Engineered a scalable **RESTful API** for data processing and retrieval using the **OpenAPI** library, designing detailed API specifications to ensure long-term maintainability.

Tesla – Software Engineering Intern Jan 2023 – Apr 2023

- Spearheaded the development of the Industrial Stations Dashboard using **Grafana** and **InfluxDB,** providing real-time data visualizations and status updates for **12+** test stations, improving monitoring efficiency.
- Engineered and optimized automated pipelines using **Python** and **Jenkins**, reducing downtime for industrial megapack test stations by **46%** and increasing testing throughput by **50%**.
- Developed a user-friendly network configuration tool with **tkinter** and **Jetstream switches CLI**, streamlining test site setup and reducing configuration time by **15 minutes** per test.

Bluescape – Software Engineering Intern May 2022 – Aug 2022

- Developed the raise hand and tile sorting features for Bluescape Meet using **TypeScript**, **React** and the **Amazon Chime SDK**, increasing user engagement during meetings by **27%**.
- Optimized real-time status updates with **GraphQL** and **TypeScript**, enhancing user identification and reducing waiting times by **22%** for Bluescape Meet.
- Implemented robust tests with **Jest** and **Sinon**, ensuring reliability and smooth deployment of new features.

Bluescape – QA Automation Intern Sept 2021 – Dec 2021

- Built and optimized end-to-end tests for the Bluescape platform using **CodeceptJS**, **TestRail** and **GitHub Actions**, reducing test execution time by **11%** and increasing test coverage by **200%**.
- Designed **K6** performance tests leveraging **WebSocket** to evaluate the capacities of Bluescape workspaces, providing actionable insights into workspace scalability and system performance under load.