BENSON SHEN

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Education

University of Waterloo   Sept 2020 – Apr 2025

Bachelor of Applied Science in **Computer Engineering (87.2%)**

Relevant courses: Algorithms & Data Structures, System Concurrency, Databases, Distributed Computing

Skills

Languages   Python, JavaScript, TypeScript, C/C++, SQL, Java, HTML, CSS, Bash, PHP

Frameworks   Node.js, React, Express, Flask, Tailwind CSS, Bootstrap, OpenAPI, Pytest, Bazel, Selenium

Tools   Git, AWS, Docker, Jenkins, Linux, MongoDB, InfluxDB, Grafana, Heroku, Jira, Postman

Experiences

Arctic Wolf – Full Stack Developer   Jan 2024 – Apr 2024

- Developed a backend server using **Python**, **Flask**, and **Bazel**, seamlessly interfacing with **7** Arctic Wolf APIs, leading to a **19%** reduction in data retrieval time for internal workflows.
- Led a comprehensive code refactoring initiative, revising over **8,000** lines of **Python** and **TypeScript** code, decreasing error rates by a significant **30%**, while improving performance and code readability.
- Designed and implemented **React** components for an internal tool, enabling task configuration and enhancing task outcome visibility. Resulted in a **25%** improvement in operational efficiency.
- Engineered a comprehensive **RESTful API** for data processing and retrieval using the **OpenAPI** library. Established clear API specifications and documentation to ensure scalability and maintainability.

Tesla – Software Development Engineer   Jan 2023 – Apr 2023

- Engineered and managed automated pipelines using **Python** and **Jenkins**, resulting in a significant reduction in downtime for industrial megapack test stations, enhancing operational efficiency.
- Spearheaded the development of the Industrial Stations Dashboard, leveraging **Grafana** and **InfluxDB** to provide real-time visualizations and updates of test station status for over **15** stations.
- Developed a user-friendly network configuration tool utilizing **tkinter** and the **Jetstream switches CLI**, streamlining the setup process for test sites and reducing configuration time by **15 minutes** per test.
- Constructed a setup procedure for seamless integration of **Linux** PCs into existing industrial test stations, boosting testing capabilities by an expected **50%.**

Bluescape – Software Engineer   May 2022 – Aug 2022

- Developed the raise hand functionality for Bluescape Meet using **React** and the **Amazon Chime SDK**, resulting in a **17%** increase in user engagement and interaction during meetings.
- Implemented efficient sorting of participant tiles and automatic hand lowering features using **TypeScript**.
- Integrated real-time updates with **GraphQL** and **TypeScript** to optimize user identification and reduce waiting time by **22%** in the Bluescape Meet waiting room.
- Formulated comprehensive tests for both frontend and backend of Bluescape Meet using **Jest** and **Sinon**.

Bluescape – Automation Engineer   Sept 2021 – Dec 2021

- Implemented and maintained **CodeceptJS** tests for the Bluescape platform, integrating **TestRail** and **GitHub Actions**, resulting in an **11%** reduction in test execution time, enhancing efficiency and reliability of tests.
- Designed **K6** performance tests to evaluate the capacities of Bluescape workspaces using **WebSocket** technology, providing valuable insights into system scalability and performance under load.

ePleyer – Junior Web Developer   Jan 2021 – Apr 2021

- Crafted sophisticated and polished designs for over **20** pages of the ePleyer website using the **Duda** platform, enhancing visual appeal and user engagement, resulting in positive feedback from stakeholders.
- Constructed dynamic webpages using a combination of **HTML**, **JavaScript**, **Tailwind CSS**, and **Twig**, improving website performance and usability, leading to a **35%** decrease in page load time.