BENSON SHEN

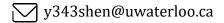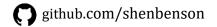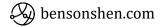✉ y343shen@uwaterloo.ca   github.com/shenbenson   bensonshen.com

Skills

Languages: Python, JavaScript, TypeScript, C, Java, C++, HTML, CSS, PHP

Tools & Libraries: Git, Jira, Node.js, Express, React, Jest, MongoDB, MySQL, Tailwind CSS

Experiences

Software Development Engineer – Tesla   Jan 2023 – Apr 2023

- Developed and maintained routines with **Python** and **Jenkins** to enable automated monitoring and upkeep of the industrial megapack test stations
- Created the Industrial Stations Dashboard to neatly display test station status using **Grafana** and **InfluxDB**
- Engineered an intuitive network configuration UI to simplify the setup and configuration process of a test site using **tkinter** and the **Jetstream switches CLI**
- Designed a setup procedure for seamless integration of new Linux PCs into the existing industrial test stations to enhance testing capabilities

Software Engineer – Bluescape   May 2022 – Aug 2022

- Developed the raise hand functionality for Bluescape Meet by utilizing **React** and the **Amazon Chime SDK**
- Devised streamlined sorting of participant tiles and automatic hand lowering features using **TypeScript**
- Integrated real-time updates with **GraphQL** and **TypeScript** to enhance the system's ability to identify users joining and exiting the Bluescape Meet waiting room
- Formulated comprehensive tests for both frontend and backend of Bluescape Meet using **Jest** and **Sinon**

Automation Engineer – Bluescape   Sept 2021 – Dec 2021

- Developed and maintained **CodeceptJS** tests for the Bluescape platform with **TestRail** and **GitHub Actions**
- Created **K6** performance tests to evaluate the capacities of Bluescape workspaces using **WebSocket**

Junior Developer – ePleyer   Jan 2021 – Apr 2021

- Created sophisticated and polished designs for the ePleyer website utilizing the **Duda** platform
- Developed dynamic webpages using a combination of **HTML**, **JavaScript**, **Tailwind CSS**, and **Twig**

Projects

ListBuddy – A personal to-do list web app   MongoDB, Express, React, Node.js

- Developed a **RESTful API** facilitating seamless HTTP communication between the frontend and backend systems
- Implemented a robust authentication mechanism using **HTTP cookies** and **JWT** with **bcrypt encryption**
- Established an efficient database infrastructure on **MongoDB Atlas** to store user data

Carey's Computers – A mock eCommerce website   HTML, CSS, PHP, MySQL, JavaScript

- Utilized **PHP** to dynamically generate product pages, seamlessly presenting data from a **MySQL** database
- Developed a user-friendly **search feature** employing GET and POST methods to enhance users' ability to locate desired products
- Designed an appealing and robust user interface through skillful application of **CSS** and **JavaScript**

Education

University of Waterloo   Sept 2020 – Apr 2025 (Expected)

Candidate for B.A.Sc. in Computer Engineering
Relevant courses: Algorithms & Data Structures, Systems Programming & Concurrency, Operating Systems