Yifei Xiao

Software Engineer • Vancouver, British Columbia, Canada

Experience

Tetra Tech 🚱 May 2023 – Current

 $Software\ Engineer$

Vancouver. BC

- Led backend development for the main product of FusionMap, refactoring the monolithic Flask backend into a microservice-based architecture on Express, resulting in an 83% improvement in API speeds.
- Designed the architecture for a database and cloud storage system that handles terabytes of client data daily.
- Set up a CI/CD pipeline using GitHub Actions and YAML files, leveraging self-hosted runners on virtual machines for deployments across multiple regions. Integrated end-to-end tests using Mocha/Chai.
- Built a subscription-based payment system utilizing Stripe API for seamless transactions.

Alida **6** Jan 2022 – Aug 2022

 $Software\ Developer\ Intern$

Vancouver, BC

- Worked on two new Dashboard types under Alida Analytics that attracted 41 new enterprise customers.
- Developed the One-Click Dashboard, reducing dashboard creation time by 75% and integrating AI models for customer feedback analysis.
- Implemented mobile platform integration for Alida Dashboards, incorporating an ETL pipeline to merge data collected on mobile platforms with the existing dashboard database.

Intel **6** Sept 2019 – May 2020

Python Developer Intern

Vancouver, BC

- Developed an internal Python tool utilized by the Intel Formal Verification team, serving as an automated verification pipeline for IC designs.
- Optimized formal verification processes using Python scripts, reducing manual tasks that would take hours down to seconds.
- Verified design specifications for individual blocks and circuit designs, Utilizing SVUnit for unit and integration testing.

Skills

Languages: TypeScript, JavaScript, Python, SQL, HTML/CSS, Java

Frameworks and Tools: Express, Flask, React, Node.js, Microsoft Azure, AWS, Linux, Git

Projects

Moda 🔗

- Conceptualized and developed Moda, a home furnishing e-commerce platform inspired by Ikea's theme of minimalistic and functional design.
- Designed scalable product listing and navigation pages by utilizing React's component-based architecture.
- Implemented a site-wide context to manage the state of the shopping cart, enabling real-time updates of cart items across the website.

UBC Course Finder &

- Created a web application tool for easily finding UBC courses based on user preferences.
- Extracted course locations from the UBC Wayfinding website using parse5 and processed into JSON files for querying.
- Built a scheduler algorithm that schedules course sections into available classrooms.

Education

University of British Columbia

Bachelor of Science in Computer Science

Sept 2017 - May 2023

Vancouver, BC