Yifei Xiao

Software Engineer • Vancouver, British Columbia, Canada

Skills

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

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

Experience

Tetra Tech 🚱 May 2023 – Current

Software Engineer

Vancouver, BC

- Led backend development for the main product of FusionMap, defining the road-map and establishing engineering best practicies for tasks within the team's scope.
- Drove and developed coding standards for Typescript to train other engineers and improve overall quality of Express applications.
- Expanded team knowledge and introduced the use of new technologies such as Express, PostgreSQL, and Mocha/Chai.
- Spearheaded the adoption of Scrum/Agile methodologies within the development team, introduced Jira and Confluence into the workflow, and consequently, improved task tracking, project management, and project visibility.
- Initiated a shift towards comprehensive documentation practices, enhancing knowledge sharing and reducing onboarding time for new team members.
- Technologies: Express, Flask, React, Azure, AWS, Node.js, PostgreSQL, Mocha/Chai, GitHub Actions

Alida **G** Jan 2022 – Aug 2022

Software Developer Intern

Vancouver, BC

- Led the design and development of multiple enterprise-level microservice applications in Alida Analytics, directly impacting 176 million users globally and driving 41 new enterprise customers in 2022.
- Developed the Oneclick Dashboard, reducing the Dashboard creation time by 75%. Applied Alida AI models to analyze and display customer feedback in customizable Dashboard templates.
- Led development for a mobile data analytics project. Implemented ETL pipeline to enrich and ingest mobile data into analytics data warehouse. Completed implementation within 80% of scoped time.
- Designed and implemented scalable APIs and backend infrastructure for managing and distributing Alida services.
- Produced bug fixes for customer-impacting issues, efficiently closing over 70 user stories within the 8-month term.
- Technologies: TypeScript, JavaScript, Node.js, React, PostgreSQL, Docker, Postman, GoCD, Jest

Intel **6** Sept 2019 – May 2020

Python Developer Intern

Vancouver, BC

- Designed and implemented a completely automated verification pipeline for integrated circuit designs in Python. Created full documentation and 100% coverage test suite from scratch as engineering owner.
- Eliminated the need to hire a new Python Developer Contractor, resulting in estimated annual savings of \$90,000.
- Verified design specifications for individual blocks and circuit designs. Utilized SVUnit for unit and integration testing.
- Technologies: Python, PyTest, Pandas, Git, XML, SystemVerilog

Projects

Moda **𝚱** | React, JavaScript, CSS3, HTML5, Prettier, Github, Git

- Moda is a home furnishing e-commerce website that makes minimalistic and functional furniture accessible to everyone.
- Implemented product listing and detail pages using React components, allowing for easy customization and scalability as the product catalog grows.
- Implemented a site-wide context using React Context API to manage the state of the shopping cart, allowing for seamless sharing of cart data between components and pages, and enabling real-time updates of cart items across the website.

UBC Course Finder **6** | TypeScript, JavaScript, Jest, JQuery

- Developed a web application that allows users to enter specifications to filter through a UBC courses data set and return courses relevant to the inputted filters.
- Parsed course data sets in the form of zip files using JSZip and processed them into JSON files for querying.
- Utilized parse5 to obtain locations for each course from the UBC Wayfinding website.
- Built a scheduler algorithm that scheduled course sections into available classrooms while maximizing student enrollment and minimizing the distance between classes.

Education