VICTOR ZHENG

@ v2zheng@uwaterloo.ca   linkedin.com/in/vzheng1   github.com/victorzheng02   victor-zheng.com

EDUCATION

Bachelor of Computer Science   Sep 2020 - Apr 2025
University of Waterloo | Cumulative GPA: 3.77/4

EXPERIENCE

Vendia   Sep 2022 - Apr 2022
Software Engineer Intern

- Engineered and developed a data pipeline to efficiently ingest over **1 million Salesforce customer records** from a major airline alliance into Vendia using **TypeScript**, **AWS Lambda**, **DynamoDB**, and **CloudFormation**
- Published an internal debugging tool to seed, trace, and replay data changes with **Node.js** and **DynamoDB**, speeding up the development cycle for the data pipeline by **40%**
- Automated cross-validation of Vendia and customer Salesforce schemas through **GraphQL** introspection to guarantee seamless integrations of customer schema changes
- Deployed an integration tool to automate writing customer event bus data into Vendia with minimal configuration for secure sharing with other companies in their business network using **AWS Lambda**, **EventBridge** and **CloudFormation**

Tradable Bits   Jan 2022 - Apr 2022
Full Stack Developer Intern

- Implemented live video banners into the Toronto Raptors' livestreaming platform through **WebSockets** to serve real-time game highlights to an average of **6,500 concurrent viewers**
- Spearheaded the creation of a scheduled email system to send automated emails on customized marketing data using **Python** and **SQL**, saving over 30 clients **2 hours per week** of manual report creation
- Developed a new customizable marketing campaign with **JavaScript** for multiple international music companies to allow fans to pre-save songs on Spotify and Apple Music using **OAuth 2.0**

1Password   May 2021 – Aug 2021
Software Developer Intern

- Led the architecture of the new **OAuth 2.0** flow implemented in multiple third-party integrations used by more than **7,700 daily active accounts** with **TypeScript**, **Go** and **Redis**, preventing CSRF and authorization code injection attacks
- Redesigned custom account group permissions for fine-grained access control through bitmasking with **React** and **TypeScript** to prevent invalid permission configurations, resolving customer complaints for more than **1,400 users**

PROJECTS

UW Blueprint - Rowan House Course Platform ⬡   May 2022 - Oct 2022

- Implemented customizable lesson components using **React** and **TypeScript** in a course builder for Rowan House, a women's emergency shelter, saving **$9,750 per year** from their previous paid course builder
- Introduced a feature to save lesson progress with **Node.js**, **MongoDB**, and **GraphQL** used by over **1,600 students** in Rowan House's preventative education course for domestic abuse

CodeyBot ⬡   Jan 2022 - Dec 2022

- Created a user profile system for the UWaterloo Computer Science Club Discord server to increase community engagement and pair mentors and mentees using **TypeScript**, **Node.js**, and **SQLite**
- Automated role assignments with **TypeScript** and **Node.js** for current students and alumni based on their profiles, allowing for an easy way to make announcements to students of a specific year for over **3,600 students**

SKILLS AND CERTIFICATIONS

Languages: Python, TypeScript, JavaScript, SQL, Go, C++, HTML, CSS

Tools and Technologies: Git, React, AWS, Node.js, Express, GraphQL, MongoDB, Flask

Certifications: AWS Certified Developer - Associate, Google Data Analytics Certificate