

VIOLET ZHOU

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TECHNICAL SKILLS

Languages Python, TypeScript, JavaScript, Golang, C++, Java, GraphQL, SQL, HTML, CSS
Frameworks NodeJS, Express, React, Postgres, MongoDB, Spark, Kafka, Selenium
DevOps Git, Docker, Kubernetes, Microsoft Azure, Webpack, Jenkins, Bitbucket, Jira

EDUCATION

Bachelor of Computer Science, University of Waterloo (CGPA: 90%) (Expected) Sep 2019 - Aug 2024

EXPERIENCE

Splunk Sep 2023 - Present
Backend Engineer Intern (Data platform) *Remote*

- Working on Splunk's distributed data receiver management system supporting the ingestion of **200+TB** data per day
- Designing and implementing centralized metrics collection to gather data from thousands of OTel collectors

Verkada May 2023 - Aug 2023
Software Engineer Intern (Sensors) *San Mateo, CA*

- Led the development of **the enhanced alert project**, which lets users interactively investigate people detected by integrating Verkada sensors with computer vision; successfully delivered this feature to **20k** users
- Built complex frontend features using **React**, **Redux**, and **Typescript**, enabling users to interact with sensor charts, camera videos, and hyperzooms of detected individuals
- Developed endpoints in **Golang** to support batch commissioning and site assignments for Verkada gateway devices

Asana May 2022 - Aug 2022
Software Engineer Intern (Core Performance) *San Francisco, CA*

- Contributed to various projects to improve the page load speed of the Asana app and the overall app performance
- Reduced the P75 load time of the Asana app by **900ms** by implementing service worker caching in **TypeScript**
- Led a project to predict and preload code chunks users will need in the future, speeding up navigations by **25%**
- Improved the performance alarm framework (**Python**) by simplifying how alarms are set up and reducing noise

Wish May 2021 - Aug 2021
Software Engineer Intern (Marketplace Framework) *San Francisco, CA (Remote)*

- Designed and built **microservices in Golang** to synchronize data between Square and Wish, allowing **3000+** Square merchants to sell products on Wish marketplace
- Utilized **Kafka** for communication between microservices and **MongoDB** for storing synchronization states

Hack the North Apr 2021 - Oct 2021
Backend Developer/Organizer *Waterloo, ON*

- Organized Canada's largest student-run hackathon with **3000+** hackers attending from **30+** countries
- Developed **GraphQL** endpoints with **TypeScript** and **Express** for the sponsorship dashboard, hackers team formation tool, and attendee dashboard used by **50+** sponsors and **2000+** attendees

Manulife Financial Sep 2020 - Dec 2020
Software Engineer Intern *Waterloo, ON (Remote)*

- Architected and implemented **PySpark** data **ETL** pipelines on **Databricks** to migrate **over 10 million rows** of claim data from 30+ Mainframe tables to Oracle database
- Improved the efficiency of existing data pipelines through data caching, broadcasting, optimizing queries and transformation processes, resulting in **20% reduction in data processing time**

PROJECTS

Libfibre — Improved the scheduling mechanism and the work-stealing algorithm of an open-source **Linux** user-level threading runtime (written in **C++**), supervised by professor Martin Karsten

Writing Hub — Developed a Q&A website for people learning the second language to post journal entries and ask questions, built with **React**, **Node**, and **Microsoft Azure**