# **Sophie Jiang**

Skills

Java, Go, Python, C, C++, SQL, JavaScript, HTML/CSS

**Tools & Frameworks** Spring, JUnit, Mockito, PostgreSQL, Prometheus, React, Pulsar, Docker, Git

### **Experience**

Languages

#### **Splunk** | Software Engineering Intern

Sept 2021 - Present

(403) 473-7658

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- Engineered a completely new security workflow using Java and Pulsar that allows research engineers to test and evaluate the efficacy of prospective threat detections on real-time customer data streams
- Implemented RESTful API endpoints to create and remove threat detections, integrating with a CI/CD pipeline to automate detection deployments and enable rapid experimentation
- Created architecture proposals, investigated proofs of concepts, and led discussions to determine the final designs of numerous experimental detection features

#### **Autonomic** | Software Engineering Intern

Jan 2021 - Apr 2021

- Implemented leader/follower pattern, load balancing, and other fail-over functionality using Java to support a high-availability data streaming platform for connected vehicles
- Built data storage solutions with PostgreSQL to track the activity of running servers within a cluster, publishing these solutions as SDK code samples to help new customers understand and debug their applications
- Performed load testing to identify system bottlenecks and resource requirements for scaling using Prometheus and Grafana monitoring, releasing five resource configurations and a troubleshooting guide for clients
- Refactored codebase of several services through introduction of the decorator pattern to improve code maintainability and increase overall velocity of new feature development

#### **Index Exchange** | Software Engineering Intern

Jan 2020 - Apr 2020

- Designed and prototyped new audit logging service to record ad exchange auction activity using Go, eliminating the need for any additional communication between dependent supply and demand auction services
- Developed a metrics package using Prometheus and OpenTelemetry to benchmark the performance of the new auction architecture in comparison to the previous system
- Implemented code generation and input data validation features to assist with efficient node creation in a graph representation of the auction engine, decreasing the initial setup time of a node by 60%

#### Shareworks by Morgan Stanley | Full Stack Developer Intern

Jan 2019 - Apr 2019

- Developed an internal logger to track specific API calls and database queries using Java, reducing manual feature testing time by 25% and eventually kept as a permanent development tool due to positive feedback
- Migrated legacy frontend components from Google Web Toolkit to React, ensuring all areas of the web product used a consistent technology stack and maintained a streamlined appearance
- Built customer-requested features from end to end by meeting with clients to discuss product designs and scope, present proofs of concepts, and demo ready to ship features

## **Projects**

#### PlaceHolder | Hack the North 2019

- Developed a web app to identify open seat availability in real-time using pressure sensors and a Raspberry Pi with Python
- Updated availability in real-time through data retrieval implemented using Node.js and Firebase Realtime Database

#### Education

University of Waterloo Wilfrid Laurier University

Bachelor of Computer Science

Expected Apr 2022

Bachelor of Business Administration, Concentration in Finance

Expected Apr 2022