

# Keary Chang

## Software Developer

Experience developing high performance networked applications to communicate between APIs in network and IoT applications. Proven ability in optimizing build processes through code refactoring and build automation tools. Skilled with communicating technical ideas through live coding or class diagrams.

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## WORK EXPERIENCE

### Java Software Developer

#### TierOne OSS Technologies Inc.

09/2020 - Present

Mississauga, Canada

*TierOne specializes in software and solutions for network service providers*

##### Achievements/Tasks

- Designed and implemented Java concurrent applications for high traffic retrieval of 500+ network performance metrics for analysis
- Worked in team to significantly refactor code base to improve Maven build times 10-15% and code maintainability
- Enhanced featureset of main software product to support data visualization and report generation using JasperReports of network alarms
- Updated application front end to SASS and CSS to CSS3 for quicker theming for custom client portals and modernized site's look and feel

### Software Developer Intern

#### TierOne OSS Technologies Inc.

09/2019 - 09/2020

Mississauga, Canada

##### Achievements/Tasks

- Involved in projects under ENCQOR 5G initiative to improve discoverability and reliability of network devices in Quebec and Ontario
- Designed and implemented Java networked applications to retrieve, parse and map network JSON data to internal software for analysis
- Created Python automated scripts and JUnit tests to format dummy data and validate program output
- Improved CICD of application in Jenkins by creating Docker build scripts and caching of common libraries

## PROJECTS/PORTFOLIO

### Automatic Database Normalizer

- Built website in React to automate database normalization to return better schema through finding redundancies
- Created SemanticUI front end for parsing user input database schema

### Adaptive Congestion Control for Internet of Things Protocol

- Modified ContikiOS in C to implement variable round trip time for packets sent over IoT protocol
- Improved network performance by 50%-90% in congested networks

## TECHNOLOGY

### Front End

Sass, jQuery, Bootstrap, Semantic

### Back End

React, Node.js, Express, Jenkins, MySQL, PostgreSQL

### Other

Maven, JUnit, JIRA, SVN, Git, Docker, Powershell Scripting, Eclipse IDE, Visual Studio Code

## PROGRAMMING LANGUAGES

Java

JavaScript

Python

HTML/CSS

C

C++

## EDUCATION

### BSc Computer Science

#### Ryerson University

09/2015 - 12/2018