

Cailing (Jessica) Zhang

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Toronto

SUMMARY

Passionate Software Engineer graduated from Queen's University with distinction specializing in Computer Science & Maths, having **12 months Co-Op experience** on Full Stack in telecommunication 5G field and 4 months full-time Back End experience in live-streaming website industry. Proficient in **Python, JavaScript and HTML**, and experienced in Scrum/Agile methodologies, multitasking, leadership and team working.

Received **Dean's Honour List** in 3 years. Eager to contribute in Software Engineer roles spanning Full Stack, Back-end, and Front-end.

EDUCATION

Queen's University

2018-2023

Bachelor of Computing (Honours)
with Distinction

GPA: 3.92/4.3

Awards:

Dean's Honour List:

2018-2019, 2019-2020

Dean's Honour List with Distinction: 2022-2023

SKILLS

Programming Languages

- Python, Java, JavaScript, TypeScript, Go, Perl, Kotlin, Haskell
- HTML, CSS, PHP
- SQL
- Prolog
- Alloy, NuSMV
- R, MATLAB

Database

- MySQL, MariaDB, SQLite, Oracle
- JDBC
- MongoDB

Frameworks and Libraries

- React, AngularJS, jQuery
- npm
- Node.js, Flask
- jqwik, JUnit, PyUnit
- Docker

Other Tools

- Power BI, Tableau, Excel, Access
- Git, GitLab, GitHub
- Jira, Azure, Power Automate
- VSCode, IntelliJ IDEA, LaTeX

WORK EXPERIENCE

Ericsson Canada Inc.

Sep 2021 – Aug 2022

5G Automation Scripting Co-Op

Ottawa, ON

A full-stack automation software development position in 5G industry, including front-end and back-end web development, database setup, management, and analysis.

- Led a SQL analysis website project called ELoggo for a 5-month period. (See **Project** for details)
- Built a custom SQL analysis page by JavaScript React and collaborated across teams to enhance ELoggo's query searching performance by **10%** through integration with a SQL query library tool.
- Gained working knowledge in Perl and Go within a 2-week timeframe to cross-team develop AngularJS microservice with Perl for automated parsing of **300** daily emails; achieved an **70% reduction** in manual re-allocation for service request categorization.

DLive Live Streaming

Feb 2021 – May 2021

Back-end Engineer

Hangzhou, China

- Directed a weekly database analysis project to produce statistical reports using MySQL and MongoDB, which provided team strategy insights and propelled monthly website traffic by **25%**.
- Collaborated with front-end developers to add chat room features using React and Node.js, resulting in a **10% increase** in daily user activity during the Valentine's 2021 campaign.
- Implemented a 'User Data Analysis' feature on internal analysis website with AngularJS, MariaDB, and PHP to facilitate real-time data insights for the team.

Continental Automotive

Dec 2020 – Jan 2021

System Engineer Intern

Chongqing, China

- Collaborated with hardware and QA teams, executing automation tests with a data-driven framework for Toyota and Nissan's new vehicles, incorporating integrated, unit and ad-hoc testing methods. Utilized MATLAB for regression analysis, data visualization and qualitative research, ensuring a streamlined project delivery.
- Re-evaluated sorting system efficiency handling over **30000+** client raw data using R Studio and reduced formatting time by **90%** by introducing Python scripts equipped with corrupted data detection and deletion features to the automation process.

PROJECTS

"ELoggo" SQL Website

Oct 2021 – Mar 2022

Ericsson Canada Inc.

Ottawa, ON

A website that enables internal stakeholders to effortlessly upload data files, select custom queries as per their exigencies, and receive a precisely queried file in return.

- Led the user-centric "ELoggo" website development over a span of 5 months from start to finish, using JavaScript, HTML5 and CSS3 with jQuery library for easy-interactive front-end design and build, and Python for back-end logic.
- Worked on website back-end development, harnessing the capabilities of the flask and Node.js environment and utilizing npm for seamless package management and integration.

Restaurant Data Management System

Jan 2023 – Apr 2023

Academic Project

Kingston, ON

Designed and developed a simulated website for a chain restaurant's data storage system:

- Establishing relational databases for restaurant services, staff, and user details using MySQL. Integrating database connectivity and facilitating specific date order lookups via SQL queries.
- Utilizing Triggers, sub-queries, temporary tables etc., store procedures to enhanced database performance and query speed.
- Crafting the web front-end using PHP, HTML5, and CSS3. Running and testing the website functionalities on phpMyAdmin.

Temporal logic model checking with NuSMV and Java

Dec 2022

Academic Project

Kingston, ON

- Expressed a designed state machine in NuSMV, captured the change of atomic proposition values and analyzed finite state machines.
- Modeled and verified cyclic synchronization barriers (Android BSP) using Java and jqwik, involving the concepts of multi-threading, monitor lock, double turnstile and concurrent programming.