

Jessica He

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EDUCATION

Candidate for Bachelor of Applied Science (B.A.Sc): Computer Engineering Sept 2019 - Apr 2024
University of Toronto St. George Campus

- Specializing in **Software Development** and pursuing a Certificate in **Engineering Business**.

EXPERIENCE

Red Hat - Software Engineering Intern May 2022 - Aug 2023

- Revamped XML formatter** in VS Code by adapting user preferences to a new fault-tolerant formatting strategy, resolved user-reported bugs and addressed enhancement requests post-delivery.
- Optimized developer experience** by developing Webview-based workflow from conceptualization in Figma to implementation in React, streamlining the creation of OpenShift Components.
- Enhanced the look and feel of Java Support** in VS Code by supporting new code-manipulating actions and polishing the appearance and content of completion results.
- Improved performance** in Java/MicroProfile/Quarkus language support by reducing communication payload size and resolving additional completion information only upon request.
- Monitored application health** by adding telemetry to track application data while minimizing footprint, and created charts in Amplitude to identify meaningful usage trends.
- Ensured robust feature quality** by developing extensive unit tests for each contribution.
- Evangelized new releases** by authoring informative blog posts and crafting engaging demos.
- Recipient of Red Hat Developer Impact Award and committership for contributions in VS Code Java (26M downloads) and VS Code XML (4.5M downloads) language extensions

CloudClub - Machine Learning Team Jan 2021 - May 2022

- Explored the machine learning workflow** with various raw datasets from exploratory data analysis, data preparation, modelling, and hyperparameter tuning in Python.

University of Toronto Robotics Association - SumoBot Competition Team Sept 2019 - Apr 2020

- Designed an autonomous combat robot** with a microcontroller, ultrasonic sensors, and a motor driver.

PROJECTS

MealDork - Python, KivyMD, JSON May 2021 - Sep 2021

- Developed a fluid application** to generate a grocery list based on recipes managed in a JSON database.
- Created an aesthetic interface** using the Kivy framework that handles various user inputs.
- Displayed recipe recommendations** on a dynamic explore page with the Spoonacular recipe API.

sMaps: City Map for Students - C++, EZGL Graphic Library Jan 2021 - Apr 2021

- Built an Interactive Map software** that maps out 20+ cities using OpenStreetMap API.
- Implemented a navigation system** using pathfinding algorithms including Dijkstra's, Greedy, and 2-opt.
- Constructed responsive data structures** to store and read live weather and large streets information.

SUMMARY OF SKILLS

Languages: Java, C/C++, TypeScript, JavaScript, Python, HTML/CSS, SQL

Technologies: React, Git, Maven, JUnit, Figma, Amplitude, Github actions, Jenkins