

Rachel Wu

• Email: ruoxuan.wu@mail.utoronto.ca
• LinkedIn: www.linkedin.com/in/rachel-wu-a05246191

• Github: <https://github.com/rachelwuuu>
• Devpost: <https://devpost.com/ruoxuanwu>

Summary of Skills

- **Main Programming Languages:** Java, Python, C++, C, HTML, Javascript, CSS, SQL.
- **Technologies:** React, Angular, SpringMVC, Flask, Node.js, MySQL, Microsoft SQL Server, Git, Docker, Selenium, Maven, Swagger.

Work Experience

Online Teaching Technology Assistant (Part-Time) - University of Toronto Sept 2020 - now

- Learned about technical challenges faced by an organization during **digital transformation**. Helped clients move their materials and resources online, and ensured that they are operating well.
- Researched compatibility between different **operating systems** and **optical drives**, and made purchase suggestions.
- Demonstrated good **time management** skills by balancing school and work.

IT Systems Assistant - Government of Ontario Jun 2020 - Sept 2020

- Developed a **Spring Boot API** using **Java** that searched information from **MySQL** and **Microsoft SQL Server database**. I created the **API shell** with **Swagger**, built the program that **queried the database** with my colleagues, did **code refactoring**, tested the API using **Postman**, **dockerized** the application, ran the **Docker image** in **Docker container**, connected it with **MySQL Docker container**, and pushed the **Docker image** to **Docker Hub**.
- Created a **Spring Boot** form submission web application using **Java**, **HTML**, **CSS**, **JavaScript** and **Bootstrap**. Built the program using **Maven**, generated a **Jar** file and a **Docker image** for the application, ran the **Docker image** in **Docker container**, and pushed the **Docker image** to **Docker Hub**.
- Built **automated browser testing applications** using **Selenium** and **Python**.

Awards and Prizes

Hack the Earth - Winner of Best Public Health Hack May 2020

- Our team won the **Best Public Health Hack** in the hackathon with **301 participants**.
- **Came up with the idea** for a program that managed the number of people inside shops to slow the spread of COVID-19. The **OpenCV** part detected people entering and exiting a shop, counted the number of people inside the shop, and sent it to **Arduino** and **MongoDB**. **Arduino** closed the door when the number of people exceeded the limit.
- Wrote the **Arduino program** that controlled a servo motor and a led light, and helped debug a **Flask** program that communicated with **Arduino** via computer port.

NSBEHacks 2020 - Winner of IBM Challenge Feb 2020

- Our team built a **chatbot** that helped new immigrants in Canada search for homes and schools using IBM Watson.
- **Allocated tasks** to team members, narrowed down the **scope** of the problem, and set **internal deadlines**.

Faculty of Applied Science & Engineering Admission Scholarship 2019

- The Faculty of Applied Science & Engineering Admission Scholarship (\$10,000) was awarded to me based on my achievements in secondary school and extracurricular involvement.

Education Background

- University of Toronto, Computer Engineering (Expected Graduation Year: 2023)

Extracurricular Activities

University of Toronto Chemical Vehicles Club (Mechatronics and Operations) Oct 2019 - Aug 2020

- **Analyzed the data** from the sensor and designed an algorithm to control the vehicle according to the data.
- **Suggested an alternative approach** to building the reaction chamber which improved the accuracy of the data collected by the sensor.