

## EDUCATION

University of Toronto  
Honors Bachelor of Science – Computer Science 2020

## SKILLS

**PROGRAMMING:** Python, C/C++, Java, Shell, Verilog, SQL, MatLab, Swift

**WEB:** HTML, CSS, Javascript, Bootstrap

**OPERATING SYSTEM:** Linux (Centos/Red Hat, Ubuntu), MacOS, Windows

**OTHERS:** IBM Cloud, Kubernetes, Docker, Virtualization, MongoDB

## EMPLOYMENT

### IBM CANADA

Software Developer Intern

May 2018 to Aug. 2019

- Performance analysis and optimization of **IBM Private Cloud** on Power platform, demonstrating the use of recent technologies such as **Kubernetes**, **Docker**, and **OpenShift**.
- Configured the environment of **KVM** on IBM Cloud, including installing the image, assigning external storage from V7K, setting up the network, deploying charts, apps, and workloads.
- Containerized the workload and developed a test automation script using Python and Shell to increase the testing efficiency by around 40%.
- Used Scrum Agile Methodology and collaborated with software teams to determine appropriate solutions and ensure test planning adheres to the proper requirements.
- Managed over 100 servers owned by my team, and developed a tool for applying the batch security patches.

## PROJECTS

### CONDO RATING WEBSITE (HTML, JAVASCRIPT, CSS, MONGODB)

Dec. 2019 to Feb. 2020

- Designed and developed a RESTFUL style website that allowed users to search condos and leave reviews and ratings. The website was designed to help users to find more info about the condo before and after moving in.
- The backend was built by using Javascript, Node.js, and MongoDB, with real-time data parsed from Google API. The web application was deployed and supported on Heroku.

### 2D HUMAN POSE ESTIMATION (PYTHON)

Sept. 2019 to Dec. 2019

- Built a **deep learning** model based on the pre-trained VGG-19, trained with COCO Dataset 2017.
- Identified and matched the human joints for each person with the predicted Part Affinity Fields map, the model could be applied to any photo or video, the final test accuracy is over **80%**.

### WEB TESTING APPLICATION (PYTHON, HTML)

May 2019 to July 2019

- Built the test automation using Selenium Webdriver for a university course enrolment website.
- Wrote CSS Selectors, Xpath expressions to identify web elements.
- Enrolled in the course whenever there is an available slot with given course code and refreshing frequency.

### LIGHTWEIGHT FILE SYSTEM (C)

Feb. 2018 to Apr. 2018

- Built a lightweight ext2 file system and developed tools to modify ext2-format virtual disks, including copy, delete, symbolic link files and folders, etc.
- Connected several computers in local networks by socket. Clients were able to send files or text messages to each other while the server could be deployed on any terminal.

## CERTIFICATE