Toronto, ON
(778) 883-0696

Ron Hu

ron.hu@mail.utoronto.ca
Web CV

Experience

Software Engineer, Intern **Amazon Web Services** **May 2022 - Aug. 2022**

Kinesis Data Streams

- Reduced weekly effort to remove faulty backend hosts from 8 hours of work distributed among 8 workers to 1.5 hours for 1 worker by automating faulty hostsets detection in **Python** using internal data metrics. Resulted in **saving 81% of weekly work hours on the task (338 hours / year)**
- Created **Python** scripts to automatically generate capacity reports for the team to make data-driven decisions on reserving future capacity. Resulted in **saving 1 developer day a week (416 hours / year)**
- Built various **Python** scripts to further automate on-call experience

Software Developer, Research **Centivizer** **Dec. 2021 - Feb. 2022**

4VRYoung

- Discussed the design and implementation the software architecture with **NodeJS** and REST API for 2Race-WithMe, an interactive game controlled using a foot pedal for older adults with Alzheimer's to exercise
- Implemented code to further increase 4VRYoung's (VR version of 2RaceWithMe) VR video library in **Unity**

Data Analyst, Intern **Royal Bank of Canada** **May 2021 - May 2022**

Home Equity Finance

- Made a +$300MM total annual balance impact by detecting a list of 5k+ clients with attrition-like behaviour monthly from internal RBC mortgage and external credit bureau data - **won quarterly Home Equity Finance "Made A Difference" performance award**
- Develop dynamic and efficient **Teradata SQL** queries to retrieve mortgage transactional data for in-house and ad-hoc requests
- Automated data gathering for monthly report from OSFI website by building a **Python** web scrapping script
- Built auto-refreshing **Tableau** dashboards reporting insights from monthly incoming data
- Implemented a forecasting model to predict daily number of incoming mortgage applications in a two week period

Education

Toronto, ON **University of Toronto** **Graduating: May 2023**

- Bachelor of Applied Science and Engineering in Computer Engineering
- Coursework: Algorithms & Data Structures; Software Engineering; Operating Systems; Databases; Introduction to Machine Learning; Computer Architecture; Engineering Entrepreneurship; Calculus III

Projects

- **Geographical Information System:** A GIS that is able to search for intersections or points of interests and calculate the shortest route between two intersections for up to 20 different cities in the world. Worked as the project manager in a team of four. **C++, ezgl**
- **INFOX (Forks Insight):** A web application to track and visualize GitHub forks to maximize productivity in fork-based development, allowing developers in different forks to avoid duplicate work. Currently working on this as my graduation project. Working in a team of five. **Flask, JavaScript, React**
- **House Number Image Inpainting:** Uses machine learning to repair images of house numbers through a technique called image inpainting. Worked in a team of four. **pyTorch, Pandas**

Languages and Technologies

- **Programming:** Python, Java, SQL, C, C++, HTML, CSS, git
- **Full-stack:** Spring Boot, MongoDB, ExpressJS, Angular, NodeJS, Flask