

Experience

Software Engineer, Intern	Amazon Web Services	May 2022 - Aug. 2022
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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
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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
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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
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- Bachelor of Applied Science and Engineering in Computer Engineering
- Coursework: Algorithms & Data Structures; Operating Systems; Databases; Introduction to Machine Learning; Computer Architecture; Engineering Entrepreneurship; Calculus III

Technical Experience

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. 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. Flask, JavaScript, React
- **House Number Image Inpainting:** Uses machine learning to repair images of house numbers through a technique called image inpainting. pyTorch, Pandas

Languages and Technologies

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