Quinn Ha

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EDUCATION

McMaster University Hamilton, ON
B.Eng in Software Engineering with Co-op ⧉ *Jul. 2019 - May 2024*

- GPA: 4.0
- Relevant Coursework: Data Structures and Algorithms, Databases, Concurrent Programming, Software Design

SOFTWARE DEVELOPMENT EXPERIENCE

Software Developer Intern May 2021 - Aug 2021
Canadian Space Agency ⧉ *Montreal, QC*

- Engineered a FreeRTOS port in **C** for NASA's Core Flight System (cFS), unblocking development for over 10 models of micro-controllers for the Lunar Gateway and Canadarm3 missions.
- Developed an Operating System Abstraction Layer (OSAL) for a 32-bit system architecture, enabling core systems to interface OS applications such as **semaphores**, **queues**, and **tasks**.
- Designed and integrated CMake scripts into core cFS layers, extending software architecture to integrate custom FreeRTOS implementation with 5 mission applications.

Data Scientist Nov 2020 - Mar 2021
Magarvey Labs under McMaster University ⧉ *Remote*

- Utilized data science and machine learning to discover matching pairs of genomes to natural products, to develop antibodies against modulate drug-resistant pathogens.
- Generated over 20 datasets from 5 APIs using **Python**, utilizing data to train Hugging Face **NLP** models.

Automated QA Engineer Intern May 2020 - Aug 2020
Equitable Bank ⧉ *Toronto, ON*

- Engineered over 200 automated testing scripts for web and mobile applications with **JMeter** and **SoapUI**.
- Built an automated daily testing framework using **ProtractorJS**, decreasing average time of test by 60% and increasing testing efficiency by 3%.
- Performed data analytics on testing results, collaborating with developers to decrease average loadtime by 10%.

OTHER PROFESSIONAL EXPERIENCE

Product Management Intern May 2022 - Aug 2022
Purolator Inc. ⧉ *Toronto, ON*

- Championed various product features for Purolator's **B2B**, **B2C**, and internal tools, resulting in an 4% increase in adoption rate, and a $60,000 reduction in monthly operations costs.
- Led customer interviews and usability testing sessions, leading to the inception of over 6 features which eased customer pain points, while aligning with the product vision and business values.
- Spearheaded Purolator's first internal digital data product to provide visibility over internal operations, conducting competitive analysis, user interviews, and iterating on user requirements.
- Managed cross-functional team and stakeholder communication, and oversaw over 3 features from inception to implementation, leading to a 5% increase in KPIs.

Teaching Assistant Jan 2021
McMaster University ⧉ *Hamilton, ON*

- Performed as a teaching assistant for the course 1CP3: C++ Programming, 1PR3: **Object-Oriented Programming in C++** and 1P13: **Integrated Cornerstone Design Projects in Engineering**.
- Delivered lectures and lab content for over 100 students on programming in **Python** and C++, including concepts such as **data structures**, control structures, and **algorithm design**.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, MySQL, MATLAB
Web Development: HTML5, CSS, Javascript, React, NodeJS
Other Tools: MySQL, Git, Linux, Docker, FreeRTOS, STM32 MCU