

Morgan Yu

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EDUCATION

University of Waterloo

Candidate for Bachelor of Applied Science in Computer Engineering

Waterloo, On

Sept. 2023 – May 2028

TECHNICAL SKILLS

Languages: Assembly, C++, Java, Python

Developer Tools: Eclipse, Replit, VS Code

Design Tools: AutoCAD, TinkerCAD, Fritzing, Logisim, OpenPLC

Data Visualization: Adobe Acrobat, Google Sheets, Google Slides, Microsoft PowerPoint, Microsoft Excel, MS Office

PROJECTS

VIN Scriber Web Application | *VSCode, Python, Django, SQL*

Feb. 2024 – Apr. 2024

- Created a Python web application using Django to eliminate all possible errors during the scribing of the truck to increase the efficiency of the production line
- Iterated through the project design life cycle to design and implement a web application into production by creating documentation such as the scope and user guides
- Implemented ASCII protocols to communicate between the web application and industrial VIN scriber via UDP socket connection
- Deployed web application to company's network using Microsoft IIS on a web server
- Queried multiple SQL tables to insert and pull data

Personal Website | *HTML, CSS*

Apr 2024

- Developed a responsive portfolio website using HTML and CSS
- Applied CSS and bootstraps to create the client-side interface

Stock Transaction Sorter | *VSCode, C++*

Oct. 2023 – Nov. 2023

- Developed a C++ program designed to efficiently process transaction data using the selection sort algorithm, delivering organized results
- Used object-oriented programming by applying classes, constructors, destructors, and method overloading
- Applied programming concepts such as addresses, pointers, and dynamically allocated memory to make effective singly linked lists

Cat Dash | *Java, Eclipse*

December 2022 – January 2023

- Developed a pixel-art, endless-running game using 5+ methods to simplify the program code
- Applied Java graphics to create the user interface

EXPERIENCE

IT Co-op Student

Feb. 2024 – Apr. 2024

Hino Motors Canada

Mississauga, On

- Created and deployed a Python web application that interacted with an industrial VIN Scriber which allowed the removal of all errors for the inscribing process on the production line
- Communicated with supervisors on the progress of tickets and tasks through daily IT meetings
- Created documentation for the web application including a user guide and administration handbook
- Assisted the IT help-desk by completing tickets from both the Mississauga and Woodstock Hino Motors locations
- Deployed and conducted end-of-employment procedures on computers for users

Assistant Instructor

July 2023 – August 2023

City of Markham

Markham, On

- Assisted a cooking class and three activity-based workshops for a total class size of 30 students
- Taught students 7 recipes that improved fine motor and safety skills over a two-month term
- Created and organized cooking recipes and activities for students

Competition Logistics Director

August 2022 – May 2023

Integirls

Toronto, On

- Delegated tasks for a team of three individuals to create math competition questions and games
- Negotiated with 50+ businesses for sponsorships through emails and acquired 500 dollars in funding
- Assisted the planning of two math competitions virtually and in-person with a combined total of 70 participants