

Rizwan Kassamali

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Skills

- **Java** – Over 2 years of experience with object-oriented programming, data structures, Java AWT and Java Swing
 - **C++** - Over a year of experience through a university course, enhanced by personal interest and design team
 - **Python** – More than 9 months of knowledge with loops, functions, lists, arrays, file management and Tkinter GUI
 - **HTML, CSS & JavaScript** – 6+ months of experience via the development of a website, used Angular framework, and upload to GitHub via Git terminal
 - **VHDL** – 3 months of practical involvement programming various programs with a FPGA
 - **Microsoft Office Suite** – proficient with Word, Excel, PowerPoint, and Macros through various projects
 - **Circuit design and soldering** – constructed various circuits with breadboards using logic gates then transferred and soldered the circuits to PCBs
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Experience

Loblaw Companies Ltd.

May 2020 – Aug 2020

- Created Python scripts to check the number of live stores and ensure files are sent in the correct order
- Managed and updated servers and gateways using SQL
- Integrated SQL queries into python to mass unassign all broken tags from their respective server

Waterloo Aqua Drone Design Team

Aug 2020 - Present

- Used Python and C++ to update the aqua drone sensors, stability control and thrusters
 - Worked on both software and electrical teams to ensure that all software works correctly and efficiently
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Projects

Encryptions

May 2019, Nov 2019

- Designed 2 different message encryption programs, in Java and C++
- Encryption in Java uses a randomizer, conversion to hex, Caesar ciphers and concatenating ASCII values
- C++ based encryption uses a key given by the user to randomize the characters, then applied ASCII Armour
- Created decryptions for both programs that gave back the original phrase

Tasks App

May 2020 – Present

- Created a Python app where users can track upcoming tasks, sort by name or date and filter tasks
- Designed an interactive graphic user interface using Tkinter library

Bank Program

Apr 2018 – Jun 2018

- Created a java program where user can track the amount of money in their bank account
- Kept a history of the user's transactions and allowed for multiple users

Joystick

Dec 2017 - Jan 2018

- Built a joystick that could be used as input to a computer via the parallel port
 - Designed a maze and tic-tac-toe games that used the joystick to control the movement
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Education

Candidate for B.A.Sc. in Computer Engineering – University of Waterloo

Sep 2019 – Present

- Relevant Courses: Algorithms and Data Structures, Digital Computers & Digital Circuits and Systems
 - Received President's Scholarship for average above 90%
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Interests - Technology | Hockey | Autonomous Vehicles | Space Exploration | Music