# **Mohamad Alkahil**

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#### **EDUCATION**

## B. Eng. Computer Engineering at Ryerson University

**Expected April 2022** 

- CGPA: 3.42
- Course Work: Algorithms and Data Structures, Object Oriented Analysis Design, Database Systems, Discrete Mathematics

### LANGUAGES AND PROGRAMS

Java, C, SQL, MATLAB

NetBeans, sqldeveloper, Mobaxterm

#### **WORK AND VOULNTEER EXPERIENCE**

## City of Toronto — Pool Manager/Swim Instructor

**December 2015 – Present** 

 Providing swimming instruction, skill evaluation, supervision of the participants, accident prevention, rescue skills, public education and public relations

#### **Ontario Science Centre-** *Science School Student Volunteer*

September 2017 - January 2018

- Facilitated interactive science activities with visitors to the Ontario Science Centre
- Participated in science workshops with (K-12) students from visiting schools

### **PROJECTS**

Dating Application September 2020

- Developed a dating application using SQL for the database and Java for the functionality
- The GUI was built using JavaFX
- Certain aspects of the project were completed using a Unix shell from a MobaXtrem which is very similar to Bash
- The project was completed in a group of two in which version control similar to Gitlab was used

## **Banking Application**

January 2020

- Developed a banking program using Java in which the GUI was built using JavaFX.
- The application was built for the Object Oriented Eng Analysis and Design class in built using the software development process in which things such as J-unit testing, and UM modeling were completed

#### **Robotic Arm**

November 2017 - December 2017

- Worked in a team of 4, to create a robotic arm that responded to pressurized glove.
- The Robotic hand was made several servo motors, cardboard, cut up straws, and string.
- The glove was made from cardboard, and a conductive material called Velostat and copper tape.
- The glove sent signals to an Arduino microcontroller, which then based off the code would send instructions to the servo motors which would control the Robotic arm.
- The project was presented for a day at the Inventorium at the Ontario Science Centre.

## Tower of Hanoi Game

January 2020

- Developed a recursion sort algorithm for the Tower of Hanoi using C.
- The program can solve for any number of disks for any configuration of the start tower to the destination tower.

## **Boe-Bot Robot**

November 2016 - December 2016

 Built and programmed a PBASIC Boe Bot Robot. The Robot moved based off a photodetector to determine where there was light.