# **Omar Husain**

omarhusain2@gmail.com website: omarhusain.co 55 Sweetland Ave. Apt. 7 Ottawa, ON, Canada K1N 7T7 (613) 793-1166

#### **EDUCATION**

# **BASc. Mechanical Engineering**

2015 - 2019 (Expected)

## **University of Ottawa**

- GPA: 9.30 (out of 10.00)
- Awards: Dean's Honour List, Merit Scholarship, Altamira Scholarship

## **Bachelor of Arts (Honours)**

2011 - 2014

McGill University Montreal, QC

· Double Major: Political Science and Philosophy

#### SKILLS

**Programming:** C/C++, Python, JAVA, Arduino, VBA, MATLAB **Machining:** Vertical mill, lathe, spot welding, soldering, drill press

#### WORK EXPERIENCE

#### Programmer, Immigration Refugees and Citizenship Canada (IRCC)

## **Corporate Affairs - ATIP**

January 2018 - September 2018

- Employed part time as a programmer for IRCC.
- Tasks include developing and designing software solutions for automating client requests.
- Extensive use of the .net framework to create two webscrapers for the purposes of automation.
- The software is now in use and processing times have become shorter and more accurate.
- Reference: Lindsay Bright lindsay.bright@cic.gc.ca.

## **IRCC - Case Processing Center - Ottawa**

March 2015-September 2017

- Employed every summer since summer 2015.
- · Gained experience developing software tools to automate the archiving process.

#### ACADEMIC PROJECTS

#### Simulation of Flow Over an Airfoil

**April 2019** 

- Wrote a computer simulation in c++ of flow over an airplane wing.
- Animaiton of simulation can be found on my website http://omarhusain.co/2019/04/27/NACA\_Airfoil.html.

# **Self-Leveling Glider**

October 2017-January 2018

- Developed a self-leveling glider using an RC glider, a microcontroller, an IMU and 3 servos. Created a PID controller to ensure level flight.
- For more details on this project visit my website: http://omarhusain.co/2017/11/01/SelfLevelingGlider.html.

# **University of Ottawa Rocketry Team**

February 2017-October 2017

- See my website for more details on this project: http://omarhusain.co/2017/09/30/StateMachine.html.
- Programmed a state machine for the ignition system to be able to ignite the fuel and control a servo valve for the oxidizer flow.

### **Drawing Robot**

January 2016

- Designed and built a 2D plotter with software for making beautiful images.
- For more details on this project visit my website: http://omarhusain.co/2016/01/22/drawingRobot.html.

#### INTERESTS

- Flying: Pursuing a private pilot's license at Rockcliffe Flying Club, Ottawa. Completed ground school and have amassed 6 hours of flying so far.
- Sports: basketball, hockey Played Jr. B Hockey, and Semi-professional in Europe.
- Drawing, poetry Artwork can be found on my website http://omarhusain.co/.
- Electric Guitar Have been taking lessons for the last year.