# Zein Hajj-Ali

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# **Objective**

I am passionate about working in a field in which I have the capacity to truly make a difference in the world. I am always reading and learning about new subjects and technologies and can quickly pick up any other skills that may be needed.

## **Education**

# BACHELOR OF ENGINEERING – COMPUTER SYSTEMS ENGINEERING CARLETON UNIVERSITY | OTTAWA, ON | 2015-2019

- Expected to graduate December 2019
- · Currently 4th year status

# **Skills & Abilities**

#### **TECHNICAL SKILLS**

- · Proficient: Java, C/C++, Python, Git, Arduino, Raspberry Pi, Real-time systems, Software design patterns, Data Structures, Microprocessor systems, Technical writing
- · Intermediate: FPGA, microcontrollers, NodeMCU, x86 assembly, ARM assembly, Bash

#### **LEADERSHIP SKILLS**

- · Leader of 4th year Computer Systems Design Lab project group
- · Led high school's robotics team to second place in the region's Botball competition in senior year.
- · Head of scout troop with The Scout Association.
  - Participated in many events to do with environmental consciousness and charity drives.
  - Helped with setting the world record for most clothes donated in 24 hours.

# **Projects**

# TEAM MEMBER | NORTHERN NOMAD SYSTEMS DEVELOPMENT & INTEGRATION CARLETON UNIVERSITY | OTTAWA, ON | SEP 2018 - MAR 2019

- · Final Report: https://zeinhajjali.com/media/NNSI/ZeinHajjAli-NNSI-FinalReport.pdf
- · Tested Raspberry Pi and built Python scripts
- · Preformed research on Northern Nomad and associated technologies
- · Designed multiplexing system for analog sensor reading prototype

# TEAM MEMBER | SELF-BALANCING ARDUINO BASED ROBOT

### CARLETON UNIVERSITY | OTTAWA, ON | JAN 2018 - MAR 2019

- · Github repo: <a href="https://github.com/ZeinHajjAli/4805-selfBalancingRobot">https://github.com/ZeinHajjAli/4805-selfBalancingRobot</a>
- · Worked on self-balancing algorithm and framework
- · Assigned tasks to team members and managed project timeline
- · Built and preformed unit tests and final tests

#### TEAM MEMBER | THE CONNECTED MIRROR

### CARLETON UNIVERISTY | OTTAWA, ON | OCT 2017 - DEC 2017

- · Github repo: <a href="https://github.com/ConnorMacKenzie/theConnectedMirror">https://github.com/ConnorMacKenzie/theConnectedMirror</a>
- · Set up Raspberry Pi for control and GUI
- · Set up Arduino for proximity sensors and lighting
- · Built GUI and helped put project pieces together