Mostafa **AYESH**

Mechatronics Engineering Student

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Education

2014 - 2020 | **Bachelor of Mechatronics Engineering, McMaster University, Hamilton**

- Registered in the Engineering CO-OP Program
- Registered in the Management Program which helps develop management skills and professionalism

Skills

Programming : C++, C, Python, X86 Assembly, Java, Javascript, Bash, Verilog HDL, VBA
Tools : IntelliJ Idea, Visual Studio, Quartus II, Android Studio, SVN, git
Software : MATLAB, Simulink, Microsoft Excel, Word, Project
Hardware : ARM Cortex-M (STM32), Arduino, FPGA (Altera Cyclone II)
Operating Systems : Linux, Unix, Windows, macOS
Protocols : MQTT, CAN, UART, TCP/IP, SSH, FTP
Concepts : RTOS, OOP, SDLC

Experience

Fall 2017 | **Undergraduate Teaching Assistant (SFWRENG 3K04), McMaster University, Hamilton**

SFWRENG 3K04 is a software design process focused course that discusses Safety Critical Embedded Systems and Model Based Software Development. Responsibilities include :

- Supervising and preparing material for the labs
- Marking Assignments and Midterms

MATLAB Simulink | mbedOS (C++)

Summer 2017 | **Summer Undergraduate Research Assistant, McMaster University, Hamilton**

In a team of 4 and under the supervision of Dr. Alan Wassyng and Dr. Mark Lawford, developed a real-time Pacemaker system that runs on a variety of Embedded Microcontrollers.

MATLAB Simulink | LABVIEW | mbedOS (C++)

Summer 2016 | **Summer Trainee, Al-Sulaibiya Wastewater Treatment & Reclamation Plant, Kuwait**

- Operated remote monitoring and control systems specifically SCADA
- Observed installation of equipment on-site including Blowers and 11KV panels
- Utilized effective communication skills by preparing weekly reports and a final written report

SCADA

Projects

2017 - Present | **curiosityOS**

Leading a team of 4, curiosityOS is a real-time operating system for embedded applications designed to handle dual core communication used to receive and process data from multiple sensors in real-time.

C

Jan 2017 | **The Cursor Bar, DeltaHacks III**

Developed in a team of 2, an Android app that connects your phone to your Windows computer allowing the user to launch applications and to perform keyboard shortcuts on their computer.

Java | Python | Android Studio

Awards and Honors

2014 **President's Entrance Award Scholarship**
2014 - 2015 **Dean's Honor List**

Memberships and Extracurriculars

2014 - Present **Student Member**, Software Engineering Club, McMaster University
2014 - Present **Student Member**, Professional Engineers Ontario
Jan 2017 **Participant**, DeltaHacks III Hackathon, McMaster University