

MOHAMED EL SHATSHAT

UNIVERSITY OF WATERLOO
THIRD YEAR MECHATRONICS ENGINEERING

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WORK EXPERIENCE

Onion

SQA Developer
Sept 2016 – Dec 2016

- Revamped web-based Setup Wizard and Console for the Omega
- Developed a network manager written in bash
- Wrote extensive documentation for the Omega2 leading up to the fulfillment of Kickstarter pledges
- Created a **Node.js** application for formatting JSON data that would then be exported to a database

Imagine Communications

SQA Developer
Jan 2016 – May 2016

- Worked as part of the Onyx team to identify and fix bugs
- Wrote **Python** scripts to perform weekend stress testing

Solus Robots

Mechatronics Engineer
Jan 2016 – May 2016

- Designed and manufactured multiple prototype robot arms using **SOLIDWORKS**, **CNC Routers**, and **3D Printers**
- **Soldered** Arduino shields and designed **PCB prototypes** for arm sensors

PROJECTS

Space Invaders

July 2016

- Created a Space Invaders clone in **C** on a Keil RTX development board
- Used multiple threads to handle the display refresh, game logic, peripherals, and score

Midnight Project

Jan 2016

- **'Top 10'** at Hack for Health 2016
Created application for Multiple Sclerosis patients to track their daily routines and plot their physical response
- Designed a questionnaire GUI in **Python** using PyQT and implemented a database to store the responses using MySQL
- Plotted the data using Excel and wrote macros in VBA to notify the user of changes via email

EDUCATION

University of Waterloo

Mechatronics Engineering
Sept 2014 – May 2019

- Currently completing my 3A term in the Mechatronics Engineering program

SKILLS

Software:

HTML, CSS, Node.js, JavaScript, jQuery, Python, Shell Scripting, C/C++, MATLAB, MySQL

Hardware:

SOLIDWORKS, AutoCAD, PCB Prototyping, Soldering, 3D Printing, Woodworking

Tools:

Windows, Linux, Git, Arduino, MS Office, ANSYS, OpenWRT

Other:

Bootstrap, Polymer, Fluent in French

VOLUNTEERISM

WICS Hardware Workshop:

Led a demonstration of the Omega2 Linux Computer
Nov 2016

Primary School Prep:

Organized school equipment for the upcoming school year at Kingsley School in Etobicoke
Sept 2015