KHANG NGUYEN

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Highlights of Qualifications

- In-depth knowledge of **data structures** and **digital systems** seen through relevant projects
- High proficiency with **C**, **Java**, and **Python** developed through coursework
- Strong **communication** and **teamwork** skills developed from extracurriculars

Education

Bachelor of Engineering, Computer (Co-op) 2016 to Present
McMaster University, Hamilton ON

Work Experience

Engineering Intern, Glad-Clorox Orangeville Summer 2018

- Led Engineering meetings and Kaizen events
- Designed and modeled replacement parts using **AutoCad Inventor**
- Assisted in engineering cost and energy savings projects

Relevant Projects and Extra Curriculars

McMaster Solar Car Project

- Partnered with two others to help design and manufacture a battery protection system which manages over-discharge and overheating using a **PIC Microcontroller** and relay
- Developed **time management** skills by multitasking in a deadline-oriented environment

Heart Rate Sensor

- Designed a Heart rate data acquisition system with an Esduino and **Embedded C**
- Set the E-Clock speed, Baud rate and ADC based on project specifications
- Implemented **MATLAB** to serially communicate with the micro controller and graphically display the heart rate's beats per minute

Python OCR script

- Wrote a python script that uses OCR(Optical Character Recognition) to convert images of text to a string
- Created a simple Flask Server that can communicate inside my home network using **Raspberry Pi**
- Printed the converted strings by using a thermal printer and an **ESP8266**

First Robotics

- Worked cooperatively with a team of three to create a robot to participate in the FIRST robotics competition
- Developed **project management** skills by working within a set budget and meeting teammate and team lead design requirements

McMaster Delta Hacks 3

- Collaborated with a team of four to attempt in creating a meditation app utilizing a MUSE headset and web server within a 36 hour time frame
  Ability to learn quickly and problem solve developed from the 36 hour time constriction

Technical Skills

Languages: Java, Python, Assembly, C, Embedded C, Flask, HTML, CSS, JavaScript
Programs: MATLAB, PSpice, Quartus, Arduino, Linux, Microsoft Office tools, MP Labs
Hardware: Soldering, PCB Design