# **KHANG NGUYEN**

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## Skills

## Languages

Python C/ Embedded Java JavaScript HTML5 CSS3 Assembly

#### **Programs**

Quartus MATLAB PSpice Arduino Linux AutoCAD

#### **Hardware**

Verilog PCB Design Soldering

#### **Interests**

Arduino
Rasberry Pi
Traveling
Music
Electric Vehicles
Hackathons

## **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

# **Work Experience**

## **AutoCAD Engineer, Glad-Clorox Orangeville**

**Summer 2018** 

- Reduced re-occurring costs down by 3% by designing replacement parts using a 3D-Printer and AutoCAD Inventor
- Spearheaded cooling solution for ERIMA Blender resulting in a 5% drop in temperature and positive feedback from plant workers
- Worked directly with third-party vendors and contractors as a project manager

## **Relevant Projects and Extracurriculars**

## **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

#### **Education**

Bachelor of Engineering, Computer (Co-Op) McMaster University, Hamilton ON **Expected Completion 2021**