# KHANG NGUYEN

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# **Skills**

#### Hardware

Verilog PCB Design Assembly Quartus Soldering

### Languages

Python C / Embedded Java JavaScript HTML5 CSS3

## Software

MATLAB
PSpice / Cadence
Arduino
Linux
AutoCAD

#### Interests

Arduino
Electronics
Rasberry Pi
Traveling
Music
Electric
Vehicles
Hackathons

# **Highlights of Qualifications**

- In-depth knowledge of Verilog and Digital Systems seen through coursework
- High proficiency with C, Java, and Python developed through projects
- Strong communication and teamwork skills developed from work experience

# **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**

September-May 2018

- Collaborated 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 January-May 2018

- 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 Summer 2018

- 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 home network using Raspberry Pi
- Printed the converted strings by using a thermal printer and an ESP8266 microcontroller

#### McMaster Delta Hacks 3

January 2017

- 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

# **Education**

Bachelor of Engineering, Computer (Co-Op)

**Expected Completion 2020** 

McMaster University, Hamilton ON

Relevant Courses: Digital System Design, Data Structures and Algorithms, Microprocessors