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)   Expected Completion 2021
McMaster University, Hamilton ON