Morgan Yeung

Mechatronics Engineering

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📍 Markham, Ontario
in MorganYeung
○ MorganYeung

Aspiring Robotics Developer

Skills

PROGRAMMING

C++

Python

Labview

SQL

HTML

CSS

JS

TOOLS

AutoCAD

SolidWorks

DipTrace (Schematic and PCB Layout)

TECHNOLOGIES

Arduino

Raspberry Pi

Actuators

Sensors

3D Printing

MECHANICAL EQUIPMENT

Drill Press

Mills

Saws

Caliper

Laser Cutter

Hand-tools

ELECTRICAL EQUIPMENT

Soldering

DMM

Oscilloscope

DAQ

Employment

Flex   Markham
Test Systems Engineering Co-op   Aug 2016 to Dec 2016

•Design, manufacture and software development of bench, PTC and End of Line testers used in global manufacturing sites of automotive modules

•Developed an Arduino bench tester for an overhead lighting system, including design of a custom interface board between the Arduino Due and module

•Gained experience in soldering a variety of SMT components, building wire harnesses, milling & taping holes

•Tested and debugged various circuits/testers using oscilloscopes and multimeters

•Labview and C programming of test equipment to be used in validation and production.

•Gained experience with completing requests for quotations (RFQ), purchase orders (PO) and bill of materials (BoM)

•Research and development with Arduino and CAN interfacing to provide a simple and cost efficient method to send and recieve CAN messages

Projects

Speech101: https://devpost.com/software/speech101   Jan 2017
•Android application that records your speech for you and uses a speech to text api to record it. The outputed text is then analysed for filler words such as "um" and "like" a count of each words use is returned to the user as well as their other 3 top used words, words per minute and volume

Green Tips: https://greentip.github.io/GreenTips.github.io   Nov 2016
•Amazon Echo Alexa app to deliver a daily environmentally friendly tip bundled with an LCD display polling from our SQL database of simple green tips to save the environment through small changes with large green benefits

Connected Labs IOT Hackathon   Jun 2016
•Designed and programmed a smart fridge using IBM's Watson API which featured inventory management and smartphone integration as its main selling point

•User interface was a chat-bot either online or via smartphone to interact with the smart fridge via natural language commands

Arduino Robotics   Apr 2016
• System of colour and touch sensors, providing information to stepper and servo motors to autonomously solve a 3x3 Rubik's Cube

Robotic Sandwhich Maker   Dec 2015
•Mechatronics system to create an edible sandwich based on user input

Activities

Design Competitions
•Qhacks 2017
•McHacks 2017
•ConUHacks 2017
•EC Hacks 2016
•Waterloo Design Competition 2016
•Connected Labs Hackathon 2016

Fitness
•Intramural Ultimate Frisbee
•Intramural Ball Hockey
•Intramural Softball
•Competitive Swimming: Nationally Qualified in 2012

Cooking

Education

University of Waterloo
B.A.Sc Mechatronics Engineering 2020