KYLE JOSLING

kylejosling.me

github.com/kylejosling

SUMMARY OF QUALIFICATIONS

- Third year mechatronics engineering student with knowledge of both hardware and software systems
- Extensive experience with iterative design, problem-solving and creative thinking

EDUCATION

B. Eng. Sc. Mechatronic Systems Engineering | University of Western Ontario

Expected 2019

- Deans Honour List 3.90/4.00 GPA
- Relevant coursework: Mechatronic Design, Control Systems, Sensors and Actuators, Digital Logic Systems, Electric Machines, Microprocessors, Signal Processing, Mechanical Component Design

SKILLS

Software

Python, C++, OpenCV, ROS, Linux, MySQL, Node.js

Hardware

SolidWorks (CSWA certified), Autodesk EAGLE, VHDL, rapid prototyping, soldering

WORK EXPERIENCE

Software Developer Intern | London Hydro

May 2017 – September 2017

- Worked on a pilot project that aims to shift residential energy consumption patterns to off-peak times by implementing home automation systems and consumer-facing applications
- Contributed to development of a back-end system using AWS API Gateway, Lambda and DynamoDB to receive and prepare real-time energy data for analytics and customer use
- Wrote test scripts in Python to test APIs, devices and back-end systems
- Acted as communications lead with hardware supplier
- Developed an Amazon Alexa skill with Node.js to return users energy data

Project Management | TF Warren Group - Blastech

June 2016 – September 2016

- Tracked projects through completion for Canada's largest industrial coating applicator
- Maintained a database of projects, updated customers on project status
- Calculated surface area and paint required for coatings from engineering drawings

RELEVANT EXPERIENCE

Object Tracking Quadcopter

June 2017 - Present

- Built a quadcopter from scratch that follows coloured objects using an Arduino as a flight controller and a Raspberry Pi with OpenCV for image processing
- Developed as a personal project using a combination of off-the-shelf components and 3D printed parts

Signtellect November 2017

- Used machine learning and a Leap Motion Controller to develop a web application that teaches users sign language
- Winner of best use of Leap Motion at Hack Western 4

Western Engineering Robotic Design and Engineering Club

September 2016 - Present

- Developed image processing algorithms with OpenCV as a member of autonomous racecar team
- Implemented ROS on Nvidia Jetson to process sensor and image data