# **DEVANSH VAID**

2A MECHATRONICS ENGINEERING - CAPTIVATED LEARNER - ASPIRING ENTREPRENEUR

#### LANGUAGES TOOLS

C++AutoCAD

HTML SolidWorks

> **CSS** Microsoft Office

JavaScript Xcode

> Soldering Git

Arduino (C) SouceTree

Visual Basic 6.0 BootStrap

Ruby (learning) GitHub

Python (learning) Terminal



# ONGOING VENTURES



#### **HEXACOPTER (DRONE)**

Built a custom hexacopter using open source flight software. Next Step: Programming the drone to accomplish various tasks

#### **ARDUINO** 🖘

Constructed several circuits and sub-projects with various components. Strong experience with soldering. Familiar with Arduino language and hardware (shields, actuators).

#### **COURSE EXPERIENCE**



- Object Oriented Programming C++ &
  - Oscilloscope + Multimeters \*
  - PLC + FPGA + Microcomputers \* (current term)

### EDUCATION A



#### UNIVERSITY OF WATERLOO ®

Honours Mechatronics Engineering Class of 2019

#### GLENFOREST SECONDARY ®

International Baccalaureate 96% average Higher Level Math and Economics

# EXPERIENCE

#### © ENTREPRENEUR IN TRAINING (EIT) - CONRAD CTR. (SUMMER 2015)

- Interned at two technology based start-ups (ThinkDirty and TurnKii)
- \* Attended UI-UX and Marketing workshops, while garnering experience with creating successful start-ups

#### **WEB DEVELOPMENT INTERN -** TURNKII (EIT) (JUNE - AUGUST 2015)

- \* Front-End web development with HTML, CSS and JavaScript + jQuery alongside a Ruby On Rails platform
- \* Developed several responsive interfaces and webpages for TurnKii's service
  - >> Issue reporting and work order requests
  - → Onboarding tour for new users and webpage for upcoming service
- \* Investigated SEO techniques such as landing pages and keyword optimization

#### \* ios software tester - Thinkdirty\* (Eit) (May - June 2015)

- \* Implemented fixes for bugs and crashes using Objective-C and Xcode
- \* Programmed an Image to Text app using the Tesseract OCR framework
- \* Tested iOS app for bugs, crashes and (UI-UX) optimization
- \* Regularly used Git to initiate commits and pull-requests

#### **PROJECTS**

#### WHERE AM I - ARDUINO (ONGOING)

- \* Programming an Arduino Mega with passive infrared, temperature and ultrasonic sensors to detect human presence in an average sized room
- \* The data will subsequently be uploaded to a web server (Ethernet shield), allowing roommates to quickly know whether I am home

#### PERSONAL WEBSITE (LANDING PAGE) - HTML + CSS (2015)

- \* Designed and implemented scalable vector graphics to optimize resources
- \* Proficient in applying HTML, CSS and JavaScript to create responsive and fluid webpages through work and personal experience
- Implemented SEO strategies to increase the PageRank of the webpage

#### AUTONOMOUS GRAB AND RETRIEVE ROBOT - C (NOVEMBER 2014)

- Designed and programmed an autonomous Lego Mindstorms robot while implementing the use of various sensors and 3D printed components
- \* Hypothesized and evaluated various Mechanical design implementations to optimize sensor attachment, chassis design and object detection. (Group of 4)

#### HYDROGEN FUEL CELL CAR - C (NOVEMBER 2014)

- \* Programmed and debugged a line-following Hydrogen Fuel cell car using C++ while ensuring efficient power consumption
- \* Hardware: MSP430 microcontroller and motor controllers