# Dylan Belvedere

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Simon Fraser University

Fall 2010 – Summer 2017

Bachelor of Applied Science

Major in Mechatronic Systems Engineering

Minor in Computing Sciences Certificate in Chinese Studies

Chinese University of Hong Kong

Spring 2013

#### Skills

-Circuits (Oscilloscope, etc.) -MPU(Linux) -3D Printing and Laser -Soldering (THD, SMD)

-MCUs (Arduino, TI)

Cutting

Software

-PCB (KiCAD, Altium) -CAD (Solid Works, -C/C++, Robot C

-PLC (Siemens S7, LogixPro) SketchUp) -Full Stack Web Dev (MEAN -HMI (Siemens SIMATIC - VDHL (Designworks) stack, ReactJS)

WinCC Flexible) -Assembly(Code Warrior) -AWS (IOT, APIG, Lambda)

> -MATLAB -SQL

Courses

-Advanced Kinematics of -Industrial Control Systems -Computer Aided -Manufacturing Systems Manufacturing Robotics

Language

-Intermediate Mandarin -Basic German

## **Technical Experience**

## Plasmatic Technologies Inc.

March 2017 – October 2017

Integration Engineer

- Developed a connected security keypad and smart home platform
- Schematic and PCB design using KiCad
- MCU programming in C using Code Composer
- Embedded development using NodeJS on MPU running Linux (Debian)
- App development with a ReactJS, ExpressJS, and NodeJS

## Corvus Energy Ltd.

September 2014 – December 2014

## Electrical Engineer

- Worked with one of the leading companies in lithium-ion battery management systems in developing green power for heavy machines and vehicles
- Built test fixtures including switching boxes, and testing for PCB parts, used these fixtures to test lithium-ion battery cells, modules and packs in various ways
- Built automated cycling test fixtures for burn-in and HASS tests of power supplies
- Altium design of schematics and components

#### **ORA Scents**

August 2014 – January 2016

Co-Founder and Former CTO

- Developed proof of concept for the most technologically advanced scent diffuser, which includes multiple scent diffusion, custom lighting, and smart phone control
- Used ESP8266 MCU and Wi-Fi module to develop an app connected IOT device
- Lead technical development and meetings in a start-up environment

## Yangtze Optical Fibre and Cable

May 2013- August 2013

Electrical and Mechanical R&D Engineer

- Worked In Wuhan, China at the country's largest fibre optic cable manufacturer
- Programmed a Siemens S7-200 PLC using STEP 7 MicroWIN
- Created an HMI to work with the machine using SIMATIC WinCC Flexible
- Designed concept parts for machines for fibre string spooling in Solidworks CAD
- Developed an understanding of the entire fibre optics creation process, and optical properties of materials used in the process

## **Technical Education Experience**

## Science World Vancouver at TELUS World of Science

Robotics Program - Course Designer and Teacher

September 2012 – December 2016

- Provided students with programming and engineering advice to optimize their robots, by teaching them C programming language for VEX and Lego Mindstorm Robotics
- Developed 3 levels of course content that have been taught for 5 years

## Maker Cube –Surrey Makerspace

June 2015 – Present

Founder and Director

- Opened Surrey BC's first makerspace
- Held various workshops at our space, libraries, and schools to increase technical education in Surrey
- Managed and grew the business to offer additional services such as 3D printing, technical repair, and technical education in addition to space rental for start-ups and projects

#### Extra Curricular

## Simon Fraser University Engineering Competition

Fall 2013, Fall 2014

 $1^{\rm st}$  Place in Re-Engineering,  $1^{\rm st}$  Place Innovative Design

May 2014 – April 2017

Mechatronic Systems Enginnering Student Society

UP Events, UP External, President

#### **Awards**

- Huawei Mobile –
   Seeds of the Future 2016
- Surrey Board of Trade -Surrey Top 25 Under 25 of 2016

- APEGBC Scholarships –
   Student Member, BC Hydro 4<sup>th</sup> year
- SFU Scholarships Mechatronics Triple A Award