Bryden Fogelman

brydenfogelman.com | git.io/bf | linkedin.com/in/brydenfogleman
ENGINEERING PHYSICS STUDENT

Skills

Programming	Electrical	Mechanical
Web development (JS, HTML, CSS, Node.js, Express, Ruby)	Microcontrollers (Arduino)	Fabrication (Laser cutter, WaterJet Cutter, 3D printing)
Java (Android)	Assembly	Selection of Mechanical Components (gears, springs, flex drives, etc…)
C/C++, Python	Basic Control Theory (PID)	
MATLAB	Circuit & Software Debugging	
MongoDB, mySQL	Soldering	FEA Analysis
Git, Linux	Filtering and power circuits	Prototyping, Iterative Design
	Oscilloscope, Power Supply	

Work Experience

TSO Co-op / Security Consultant, TELUS   January 2015 - May 2015
- Active developer in the Innovation program, designed and implement small projects for other teams which required precise technical conversations with the client to deliver a product that was above expectations.
- Developed log parsers in Java that required the use of complicated regular expression that helped parse events for a big data project that was is responsible for processing millions of events a second.

Rafting Guide, REO Rafting   May 2009 - Present
- Guided more than 300 hours worth of commercial rafting trips down several different rivers with varying in difficulty.
- Demonstrated patience and presentability as a leader to overcome language barriers and teach customers proper river safety techniques to ensure group safety and satisfaction.

Technical Projects

Robot Competition, Electrical Lead | git.io/halpbot   July 2015 - Present
- Finished third in the competition with the highest overall mark among the fifteen teams in prototyping quality and design.
- Created a fully autonomous robot controlled with an Arduino that had a drive system, a mechanical arm and ability to both follow tape and IR.
- Learned prototyping skills, mechanical and electrical design, and the use of control theory in software.
- Soldered circuits on PCB boards and used a multimeter and oscilloscope to debug circuits and analyze the output
- Designed power protection circuits to prevent short circuiting and setup circuits to avoid ground loops and noise sensitivity issues

Personal Website | brydenfogelman.com   September 2015 - Present
- Built from scratch using MongoDB, Express and Node.js (using only bootstrap).

- Demonstrates ability to learn new programming skills and web development frameworks as well as proficiency in UI design.
- Used Model View Controllers, HTTP Protocols, Databases and CRUD operations to implement the web app including a blog.

Trails, Designer & Developer   December 2015
- Awarded 3rd place in Vancouver's StartUp Weekend, for designing, developing and pitching an Android application, along with a comprehensive business model, market acquisition strategy, and a fully functional MVP.
- Practiced user interface and user experience design in Android Studio in order to create a simple, yet effective way for users to navigate the app to maximize user happiness.

NwHacks, Developer | thecanarybot.com   February 2015
- Top twelve place finish for a Twitter controlled camera powered by mentions that would help promote events.
- Used the python Twitter API to create events that would trigger a javascript powered Tessel microcontroller to take photos.

Volunteer Experience
VP Events, Engineering Physics Student Association   September 2015 - Present
- Worked in a team of four, responsible for the organization and planning of events for more the 200+ students
- Actively participated in weekly council meetings to help better the student life and voice their concerns.
- Utilized my event management skills in order to plan a student trip to whistler for over thirty students.

HTML 500   January 2015
- Worked alongside novice and experienced web developers to help mentor participants, ranging in age from 12-65 with a small project in HTML and CSS

Education
University of British Columbia, Vancouver, BC   September 2013 - Present
- Bachelor of Applied Science (BASc), Engineering Physics
- Dean's Honour List Standing: sessional average of 80% or higher while taking 30 or more credits.

Lighthouse Labs Part Time Web Development Alumni   January 2015 - April 2015
- Learned the fundamentals of web development including HTML and CSS, OOP programming and databases, and built a small web app using Ruby (Sinatra)
- Went above and beyond the course material and began learning Javascript, jQuery and AJAX, completed small projects to demonstrate my proficiency with each framework

Interests and Activities
- Soccer, Snowboarding, Rafting, Robotics, Elon Musk, Web development and Web Design

References Available on Request