# Johnathan Budd

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Pursue my passion for applying Electrical and Mechanical Engineering in the fields of Automated Robotics, Renewable Energy, Transportation, and Medical Devices.

#### Education

Harvard University S.B. Electrical Engineering, Computer Science Secondary

May 2015

Cumulative GPA: 3.8 Concentration GPA: 3.9

Selected to participate in: Program for Research in Science and Engineering (2013), UTEC Collaborative Field Course in Lima, Peru (2013), Program for Mind Brain Behavior in Trento, Italy (2012)

Chaparral High School May 2011

4.6 GPA, Varsity Letter – Tennis and Water Polo, John R. Wooden Scholar Athlete Award, Chamber of Commerce Student of the Year, National Merit Scholar, National AP Scholar, 2<sup>nd</sup> Degree Black Belt

## **Engineering Experience**

#### Harvard University Teaching Fellow, ES 51: Computer-Aided Machine Design

September 2012-Present

- Lead weekly lab sessions for 20 students
- Teach students CNC milling, 3D printing, laser cutting, design, and basic shop skills
- Design curriculum for labs and final projects
- Promoted to head teaching fellow role in January 2013
- Grew course enrollment by 20%

#### **Wyss Institute for Biologically Inspired Engineering**

June 2013- Present

- Design and engineer soft exosuit for DARPA Warrior Web Initiative
- Create and customize lightweight force sensors using CNC machining, 3D printing, and PCB fabrication
- Analyze signal processing and establish new protocols
- Goal attained to improve accuracy of previous sensor by 20% with a weight reduction of 50%

## School of Engineering and Applied Sciences Racing Team

September 2012 - Present

- Team Founder and current president
- · Initiate and develop the largest undergraduate engineering project in the history of Harvard's
- Lead a team of 15 undergraduates to complete a competition ready vehicle by Spring 2014
- Secure and manage a network of corporate sponsors
- Design and perform testing for custom motor controller for ultra efficient operation

## **Harvard College Engineers Without Borders**

September 2011- Present

- Implement a sustainable water system for the community of Pinalito in the Dominican Republic
- Elected to the Executive Board in Spring 2013

#### **Technical Skills**

Solidworks, Matlab, Verilog, CNC milling and lathing, manual machining, 3D printing, laser cutting, PCB design and fabrication, welding, analog electronics, digital electronics, Microsoft Office, C, PHP, HTML, JavaScript, SQL

### **Additional Experience**

## School of Engineering and Applied Sciences Tour Guide

June 2013-Present

• Lead tours for prospective students and visiting dignitaries

# Johnathan Budd's Lawn/ Handyman Service

January 2006 - June 2011

- Business Owner and Founder
- Grew business from 2 clients to servicing 10+ clients on a weekly basis
- Managed 3 employees
- Sold business to associate with extended commission basis as original owner

## **Activities and Leadership**

Harvard College Venture Partners – Board Member, Helping students start and grow companies Harvard Men's Varsity Lightweight Crew ~ Harvard Club Triathlon Team ~ JV Sailing ~ Winthrop House Intramural Coordinator

### **Interests**

Tennis, Biking, Cooking, Camping, SCUBA diving