Evan Shebel

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OBJECTIVE

To obtain a challenging full time position in a high quality engineering environment where my mechanical design, innovative ideas, and ability to learn quickly will make me feel valued to an organization.

WORK AND UNDERGRADUATE/ INDEPENDENT PROJECTS

UPS – part time **Burtonsville, Md**
2016- Present

- Took a part time job for their education assistance to pursue an additional Bachelor of Science degree in Mathematics. I am expected to earn the degree in December 2017 should I not get a full time job before such time.

Novel Motorcycle Design for Battery Electric Powertrain **Ellicott City, Md**
2016
Shebel, Evan. 2016. *Electric Motorcycle Frame* U.S Patent Application 62/351,276, filed June 16, 2016.

- Designed a motorcycle frame specifically for the constraints of a battery electric vehicle. I then submitted a provisional utility patent for the design. More information is available in the projects section of my website here.

UAV Prototype **Jessup, Md**
UAV Solutions *2015*

- Worked among a five person team to redesign a quad rotor frame UAV for UAV Solutions. Aimed to achieve an increase in portability by having the frame fold to a volume small enough to fit into a police cruiser's trunk.
- Used lightweight materials such as carbon fiber to increase flight time; with the goal of 60 minutes of mission time.
- Utilized management and organizational tools such as a system boundary diagram, system requirements specification, conceptual design review, production schedule, Gantt chart, and bill of materials throughout the design and build phases.

Arduino Controls Project **Baltimore, Md**
2015

- Controls Lab project used the Arduino as a way to implement a control system. The project involved a throttle (potentiometer), H-Bridge Stepper Motor Driver, DC brushed motor, planetary gear set, and eccentric mass (magnet) that determined speed by sampling data from a fixed hall-effect sensor. The project was run through Lab-View to collect the data.
- The objective of the project was to map a 5V potentiometer to a motor with an unknown rpm range. The speed of the motor would be determined by reading the signal of the hall-effect sensor.

Lanscaping **Ellicott City, Md**
Self-Employed *2011– 2012, 2014*

- Independently operated a small reliable lawn care business for several years.
- Cared for lawns ranging from 2-6 acres and did all of the maintenance and repairs on the power equipment.
- Sought out and kept customers long term. Managed all of the logistics and financials of the business.

EDUCATION

University of Maryland, Baltimore County **Baltimore, MD**
Bachelors of Science in Mechanical Engineering ***ABET*** *2015*
Bachelors of Science in Mathematics ***2017***
Certifications/Classes: *Earlbeck Gases and Technologies* 40-hour class on the fundamentals of GMAW, GTAW, SMAW, and oxy-fuel welding.

Parametric Modeling: *Proficient with* SolidWorks, Inventor, ASME Y14.5
Programming: *Experience with* Matlab, Python, LabVeiw, Arduino, HTML
Office: *Experience with* Microsoft Word, Excel, and PowerPoint
Machining: *Basic experience* using manual Mill and Lathe.

Hobbies: Drawing, CAD modeling, teaching myself CAM, FEA. Riding/ Racing motorcycles. Trail Running,