

# 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 a valuable employee for the organization.*

## EDUCATION

**University of Maryland, Baltimore County**

**Baltimore, Md**

*Bachelors of Science in Mechanical Engineering ABET*

*2015*

*Bachelors of Science in Mathematics*

*Expected Dec. 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 and Inventor. Experience with Pro/Engineer and ASME Y14.5.*

**Programming:** *Proficient with Matlab, Python, LabView, Arduino, HTML*

**Office:** *Proficient with Microsoft Word, Excel, and PowerPoint*

**Machining:** *Basic experience using manual Mill and Lathe.*

## WORK AND UNDERGRADUATE/ INDEPENDENT PROJECTS

**Sand Helper, LLC**

**Clarksville, Md**

*Contract Mechanical Engineer*

*2017- Present*

- Participate in the design of electrically powered beach mobility wheelchairs.
- Create fabrication drawings to assist in the production of the beach wheelchairs.
- Seek and establish ways to increase efficiencies in the manufacturing process while reducing waste.

**UPS**

**Burtonsville, Md**

*Package Sorter- part time*

*2016- 2017*

- Manually sorted small-sized packages.
- Assisted on pre-load where packages were sorted before being placed into the trucks for final delivery.

**Novel Motorcycle Design for Battery Electric Powertrain**

**Ellicott City, Md**

*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.
- Submitted a provisional utility patent for the design. More information is available in the projects section of my website above.

**UAV Prototype**

**Jessup, Md**

*UAV Solutions*

*2015*

- Worked among a five person team to redesign a quad rotor frame UAV for UAV Solutions. Achieved 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 mission time to 30 minutes with a camera payload.
- 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*

- Used an Arduino as a way to compare an open and closed loop control system. The project incorporated a throttle (potentiometer), H-Bridge Stepper Motor Driver, DC brushed motor, planetary gear set, and eccentric mass (magnet).
- The 5V potentiometer was mapped to a motor with an unknown rpm range. The speed of the motor and magnet were determined by sampling data from a fixed hall-effect sensor. The project was run through Lab-View to collect the data.

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