**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.*

**WORK AND UNDERGRADUATE/ INDEPENDENT PROJECTS**

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| **Sand Helper, LLC**  *Consultant* | **Clarksville, Md**  *2017- Present* |

* Sand Helper is a start-up company with the intention to provide mobility and access to beaches for

the elderly or the disabled.

* I provide consulting in the areas of engineering, design, and fabrication/manufacture.

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| **UPS – part time** | **Burtonsville, Md**  *2016- 2017* |

* Part time position while pursuing a Bachelor of Science degree in Mathematics.

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| [**Novel Motorcycle Design for Battery Electric Powertrain**](https://ews6.github.io/portfolio/moto_frame.html) | **Ellicott City, Md**  *2016* |
| Shebel, Evan. 2016. *Electric Motorcycle Frame* U.S | Patent Application 62/351,276, filed June 16, 2016. |
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* 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](https://ews6.github.io/portfolio/moto_frame.html).

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| [**UAV Prototype**](https://ews6.github.io/portfolio/uav.html)  *UAV Solutions* | **Jessup, Md**  *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.

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| [**Arduino Controls Project**](https://ews6.github.io/portfolio/arduino.html) | **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.

**EDUCATION**

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| **University of Maryland, Baltimore County**  *Bachelors of Science in Mechanical Engineering* ***ABET***  *Bachelors of Science in Mathematics* | **Baltimore, Md**  *2015*  ***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, 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,