**Eric Greenwell**

**EDUCATION**

**University of Maryland,** A. James Clark School of Engineering, College Park, MD Graduation: May 2014

B.S. Mechanical EngineeringGPA 3.0

M.S. Mechanical Engineering *(in process)* GPA 4.0

**RELEVANT COURSEWORK**

Matlab

**Mechanical Design of Electronic Systems**

Electronics and Instrumentation I & II

**Finite Element Analysis**

Nuclear Reactor Safety

Product Development

**Materials Engineering**

**Computer Aided Design**

**Technical Writing**

Financial Analysis

**Data Science**

**Advanced Control Systems**

**SKILLS**

**Computer Skills:** Proficient in Microsoft Word, Excel, Power Point, Car-O-Liner precision electronic measuring equipment, **Data Processing**, Statistical Analysis (JMP) and Knowledge in Python, , Matlab, HTML and C based programming languages, Material modeling in **Solidworks** and **Ansys**

**Mechanical skills:** Gold-Class technician accredited by Wyoming Technical Institute and I-CAR, MIG & TIG welding, metal shaping, soldering, brazing, general plumbing, carpentry, and automotive mechanical skills.

**RELEVANT WORK EXPERIENCE**

**BAE Systems,** Rockville, MD Nov 2016 - Current

Mechanical Engineer, Test Development

* Develop understanding of **SWS weapon system** to improve **test development**
* Determine whether test procedures or results are out of coordination based on coordination documentation and compile comments to determine the best path forward to ensure weapon system accuracy.

**U.S Army Research Lab,** Adelphi, MD Jul 2014 – Nov 2016

*Mechanical Engineeer/ Test Director*

* Work in the **Weapons and Materials Research Directorate** as a mechanical researcher and experiment facilitator
* Developed test plans for 3-d printed **material characterization** under quasi-static and largely dynamic strain rates
* **Assist the Protection Division of (WMRD) with prototyping of protective soldier equipment**
* **Manage a group of engineers** **and technicians** to research high-G ballistic environments
* **Design and construct high-G experiments** to determine survivability and reliability of structural and mechanical components and assemblies
* **Acquire and manage two and three dimensional data** organizing them appropriately to view actual happenings in difficult to measure environments
* **Perform statistical analysis of data to determine magnitude of effect each parameter has on the outcome**
* Perform structural and thermal finite element, **multi-physical modeling** **to confirm experimental results**
* **Present at seminars Army-wide** to show research findings and capability
* Oversee/perform maintenance and update of research equipment
* Program computational high-G model software using **Python**
* Design and Construct high-G simulator control system on a microcontroller and programmed using Python

**Smart Imaging Systems,** Beltsville, MD Feb. 2014-Oct 2014

*Mechanical Engineer Intern*

* Designed a three axis dicing saw in **Solidworks** before **performing all fabrication** on site
* Communicated with end-users for design input on final product.
* Participated in large scale terrorism simulations to show system effectiveness.
* Perform **mechanical systems modeling** and fabrication using Solidworks on X-ray robotics
* Mechanical design optimization based on implicit stress, frequency and velocity models.
* Worked with the manufacturer to construct parts in large quantities.

**Contract Projects-**

Website Order Optimization-

* Accessed online based company’s database with program and wrote purchase order algorithms to satisfy purchase and shipping requirements