

## Technical Proficiency

**Mechanical Design:** SolidWorks (CAD), PTC Creo, FEA Analysis, GD&T Methodology (Basic), FMEA, Stress/Strain & Thermal Simulations, Machine Shop Certified

**Software & Languages:** Java, Python, MySQL, React JS,  $\LaTeX$ , LabVIEW, MATLAB, Microcontrollers, Arduino, JIRA, Confluence, HTML/CSS, Flask (Micro Web Framework), Microsoft Office

**Manufacturing:** Prototyping, 3D Printing, PFMEA, Quality Control Plan, Root-Cause Analysis, Othermill Pro (Desktop CNC)

**Electrical System Design:** Data Acquisition, National Instruments, Soldering, EagleCAD (PCB Design), Cirquid

## Employment

### Stealth Mode Start Up

Sept 2019 - Present

*Engineer #1 | VP of Engineering*

- Developing innovative safety solutions for renewable energy storage systems.
- Seeded by NSF SBIR/STTR grant.

### Tesla, Inc.

June 2019 - Sept 2019

*Quality Data Science & Systems*

- Was in transit for a formal position as an Associate Data Scientist.
- Developed micro-web applications in Python Flask to promote efficient communication of critical information.
- Analyzed quality metrics in compliance with Tesla's Quality Management System (QMS).
- Utilized Confluence REST API's to autonomously maintain information.

### Tesla Inc.

June 2018 - June 2019

*Quality Engineering Technician II*

- Worked extensively with programming languages, such as Python, Java, and MySQL to identify the causes of defects through data analysis, while simultaneously working to develop and implement improved processes
- Maximized efficiency and quality in accordance with the company's standards by utilizing root-cause analysis and lean manufacturing methodologies in the Model 3 battery module production

#### Achievements

- Quality Technician of the Quarter - Gigafactory 1 Q3 2018
- Successfully saved the company \$10.5M in the third and fourth quarters of 2018 by coordinating with an engineering team and senior managers to develop and implement an innovative project
- Leveraged Java, Python, and MySQL to develop stand-alone executables as serviceable quality tools

### UT Fire Research Group

February 2017 - May 2018

*Undergraduate Research Assistant*

- Acted as the leader for a team of undergraduate students, providing mentorship and coaching where needed
- Contributed to research for the automation of a testing facility that simulated indoor flashover fires
- Conducted comprehensive research into the causes of battery failure and controlled systems automation

### Applied Research Laboratories

March 2016 - December 2016

*Student Technician*

- Expedited the full-cycle of system development, designing, commissioning, fabricating, and assembly of experimental test systems according to exact specifications by utilizing an extensive knowledge of CAD software
- Developed new parts and modified existing parts in PTC Creo CAD software to enhance functionality
- Created accurate engineering drawings by leveraging Geometric Dimensioning and Tolerancing practices

## Education

**The University of Texas at Austin** - B.S., Mechanical Engineering Honors

2014 - 2018

- GPA: 3.92/4.0
- Accolades: Mechatronics Certificate | Engineer-In-Training (EIT 64856)
- Activities: Tau Beta Pi, UT Fire Research Group