

Paul J. Lee, EIT

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, ReactJS, \LaTeX , LabVIEW, MATLAB, Microcontrollers, Raspberry Pi, 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

Professional Experience

Altect, Inc. - Startup Company

Sept 2019 - Present

VP of Engineering

- Lead engineer in developing innovative safety solutions for renewable energy storage systems.
- Seeded by NSF SBIR/STTR grant.

University of Texas at Austin - Department of Mechanical Engineering

Sept 2019 - Present

Research Engineer - UT Fire Research Group

- Developed a surrogate battery energy storage system that releases safe non-flammable gases similar to that of a rack-level failure
- Created an array of custom wireless sensors tuned to detect the dissemination of the safe non-flammable gas.
- Participated in field studies with the Honolulu Fire Department and the Phoenix Fire Department to align research with industry.

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

University of Texas at Austin - Department of Mechanical Engineering

February 2017 - May 2018

Undergraduate Research Assistant - UT Fire Research Group

- Led 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

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