

Professional Experience

SpaceX

June 2023 – Present

Supplier Development Engineer – Starlink

- Act as the technical point of contact to suppliers, solve emerging issues at suppliers, analyze risk, and review production plans to grant PPAP for electrical harnessing and cable parts
- Perform Root Cause Analysis of failures to implement corrective actions for robust part quality
- Delivered electromechanical parts meeting quality and design requirements for high volume consumer electronic devices
- Review CpK data, First Article Inspection Reports, Gage R&R Reports, and Outgoing Quality Check data to verify parts are meeting production intent at the start and throughout production
- Implement manufacturing and inspection process improvements at suppliers to expedite part production rate and part quality for aviation grade components and consumer components
- Conduct DFM reviews of all power and ethernet cables, providing feedback to ensure design manufacturability and ability to inspect parts reliably
- Ensure all aviation harnessing components meet documentation and drawing requirements necessary to be compliant with FAA restrictions on air worthy components
- Develop and implement incoming inspection plans to monitor part quality and reliability according to drawing requirements following AQL standards
- Audit vendors to ensure robust quality management systems to AS9100 requirements

Rivian Automotive

Interior Materials Engineer – Rolled and Soft Goods

July 2022 – February 2023

- Owned the soft goods commodity handling materials validation, prototyping, data analysis, design of experiments, and material testing for textiles, coated textiles, laminates, and other trim materials
- Investigated production issues for materials with multiple suppliers to implement preventive actions and ensure material robustness in vehicle and timely delivery
- Collaborated with program engineers, program management, design studio, quality engineering, and suppliers to deliver quality materials in a timely manner to meet program and design requirements
- Drove development of 9 new materials that increased the sustainability of vehicles

Interior Core Engineering Intern

Summer 2021

- Managed and analyzed test data for all interior systems, over 500 components, to meet compliance with FMVSS 302 and other federal certification standards
- Oversaw test deployments and part management for curtain airbag functionality requirements

Interiors Engineering Intern

Summer 2020

- Led development of more than 40 testing specifications for vehicle interior applications based on ASTM, ISO, SAE, and FMVSS standards to support robust testing of all interior products

Magna International – Seating Division

Product Engineering Intern

Summer 2019

Design Projects

Water Temperature Control Mechanism (Senior Design) – West Lafayette, IN

Spring 2022

Testing, Project Management, Circuit Design, Product Design, Arduino, C++, Solidworks

Runner up in the Malott Innovation Award in Mechanical Engineering

2 Player Pinball/Foosball Toy (Toy Design Course) – West Lafayette, IN

Spring 2021

Surface Model Design, Linkage Mechanism Design, Creo

RC Car (Toy Design Course) – West Lafayette, IN

Spring 2021

Steering Mechanism Design, Packaging Design, Creo

Skills

CAD | CATIA | Collaboration | Validation | Rapid Prototyping | Python | DFMEA/PFMEA | GD&T | Manufacturing

Education

Purdue University – West Lafayette, IN

Spring 2022

Bachelor of Science in Mechanical Engineering – Honors

3.7/4.0