Saul Uribe

Statesville, NC

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Experience

NSI Industries | Huntersville, NC

New Product Engineer

Jan 2024 - Present

Contributed to the new product development process by implementing innovative solutions and leveraging knowledge and expertise in manufacturing methods, CAD tools, and rapid prototyping.

- Design plastic/metal housings for new and existing mass-produced electrical products using SolidWorks and FEA, ensuring optimal manufacturability and safety.
- Utilize 3D printing to test design functionality and create prototypes before committing to production tooling.
- o Develop RFQ packages, including 3D models, 2D drawings, assemblies, and BOMs.
- o Communicate with international vendors to maintain project timelines and overall success.
- Collaborate with the engineering team to identify and resolve quality issues related to plastic molding, metal stamping/forming, material selection, and packaging.
- Built test fixtures and operated lab equipment such as tensile testers, adhesion testers, humidity chambers, ovens, and freezers to prepare samples and collect data in compliance with UL standards.

Mechanical Engineering Intern

May 2022 - Jan 2024

- Revise engineering drawings for manufacturing and customer-facing applications across new and existing products.
- o Convert legacy hand-drawn engineering drawings into digital 2D format and 3D models.
- o Reverse-engineer various electrical connectors to 3D models and 2D drawings using **SolidWorks** for vendor RFQs.
- o Developed a centralized competitor cross-reference tool in Power BI, incorporating over 13,000 part numbers, to streamline customer conversions and enhance efficiency by eliminating manual cross-referencing.

Skills

Problem Solving | Teamwork | Quality Assurance | Product Development | 3D Modeling | 3D Printing (SLA/FDM/SLS) | Plastic Part Design | G-Code | Product/Material Testing | Technical Writing | FEA | SolidWorks | Creo | Inventor | Data Processing | PDM

Education

University of North Carolina at Charlotte | B.S. Mechanical Engineering | 3.60 GPA Cum Laude Mitchell Community College | Associate in Engineering | 3.70 GPA

Aug 2021 – Dec 2023 Aug 2018 – May 2021

Projects

TORK 4 Circuit Digital Timer – NSI Industries

Jan 2024 – Present

- o Collaborated with product managers to understand industry needs to develop an expandable digital timer solution.
- o Designed metal housing, ergonomic keypad, and protective wiring cover.
- o Worked closely with the electrical engineering team to implement PCB integration.

TORK In-Wall Digital Timer – NSI Industries

Jan 2024 - Present

- o Improved an outdated design using customer feedback and innovative solutions.
- o Enhanced visibility, ergonomics, and battery reserve to outperforsm competitors.
- Conducted FEA and 3D-printed prototypes to ensure safety compliance and functionality before final tooling.

UNCC Senior Design – Cellular Farms – Design of an Advanced Vertical Farm (Finalist) Jan 2023 – Dec 2023

- Collaborated with a multidisciplinary team to design and implement an indoor vertical farm with modern technologies.
- o Designed plant pallets, managed 3D models, and conducted stress simulations using FEA.
- Oversaw fabrication and presented project updates and outcomes to company owners.

UNCC Junior Design – Remote Controlled Robot (1st Place)

Aug 2022 – Dec 2022

- O Collaborated with a team of engineers to design a competition robot for secure payload transport.
- o Designed chassis and managed 3D models and 3D printing while adhering to size, budget, and power constraints.
- o The final design was evaluated based on cost, manufacturability, performance, and aesthetics. Finished in 1st place.

Certifications and Other Experience

Experience with additive machines in professional, educational, and personal environments

Aug 2021 - Present

o (Formlabs, Stratasys, Prusa, Bambu Lab, Ultimaker, Creality)

Certified SolidWorks Professional – Mechanical Design (CSWP-MD)

Mar 2022 – Present

CNC Machining Training – IACMI – The Composites Institute

Nov 2021 – Present