Saul Uribe

Statesville, NC

(704) 498-6213 | suribe1006@gmail.com | linkedin.com/in/sauluribe/ | Projects: saul-uribe.github.io or QR code



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 efficiency.
- 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. Designed to replace multiple digital timers all in one package, with the possibility for expansion of circuits in the future. Worked closely with electrical engineering team to functionally implement PCB with housing and keypad. Designed sheet metal housing, ergonomic keypad, and protective wiring cover.

TORK In-Wall Digital Timer – NSI Industries

Jan 2024 – Present

o Improvised an outdated design using customer feedback and innovative solutions. Designed to outsell competitors in retail with improved visibility, ergonomics, and battery reserve. Performed FEA and manufactured in-house prototypes using 3D printers to ensure compliance with safety standards and verify functionality before final tooling.

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

Jan 2023 – Dec 2023

Placed with a team of students with different disciplines, tasked to design and implement physical infrastructure and control
system for an indoor vertical farm. Responsibilities included design of pallets that hold plants, development and management of
3D models and assemblies, stress simulations using FEA, fabrication of vertical farm, and presentations to company owners.

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

Aug 2022 - Dec 2022

Worked with a team of mechanical engineering students in a competition to design a robot that can pick up and transport a payload securely in a timely manner. Constraints of the project included the physical size, budget and power supply. I took responsibility for managing the 3D models and 3D printing where necessary. Final design was evaluated based on manufacturing costs, manufacturability, weight, finish, aesthetics, maneuverability, stability, and time to complete the course.

Certifications and Other

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