Saul Uribe

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Mechanical engineer with a passion for additive manufacturing and experience in product development, plastic/metal part design, and rapid prototyping. Proficient in CAD, FEA analysis, and collaborating with cross-functional teams to design innovative solutions. Certified SolidWorks Professional with hands-on experience in quality assurance, material testing, and data analysis.

Work Experience

NSI Industries | New Product Engineer | Huntersville, NC

Jan 2024 -Present

- Design plastic/metal housings for new and existing mass-produced electrical products using SolidWorks and FEA.
- Established a 3D printing system and process to test design form, fit, and functionality before committing to tooling.
- Develop RFQ packages, including 3D models, 2D drawings, assemblies, and BOMs.
- Communicate with international vendors to maintain project timelines and overall success.
- Collaborate with the engineering team to identify and resolve quality issues.
- Build test fixtures and operate lab equipment to prepare samples and collect data in compliance with UL standards.

NSI Industries | Mechanical Engineering Intern | Huntersville, NC

May 2022 - Jan 2024

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

Software Skills	<u>Technical Skills</u>	<u>Soft Skills</u>
SolidWorks Creo Siemens NX Inventor	3D Printing Plastic Part Design FEA G-Code	Problem Solving Collaboration Technical
Mathcad Power BI Office 365 C++ 3D Slicers	Material Testing Soldering Data Processing ERP PDM	Writing Continuous Improvement

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

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

TORK In-Wall Digital Timer - NSI Industries

Jan 2024 - Present

Improved an outdated design using customer feedback and innovative solutions.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

Advanced Vertical Farm (Finalist) - Cellular Farms - UNCC Senior Design

Jan 2023 - Dec 2023

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

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

Aug 2022 - Dec 2022

Worked with a team of engineers to design and build a competition robot for secure payload transport. Performed engineering calculations to design around power, physical, and safety constraints. Took ownership of designing chassis, drivetrain and gripping mechanism, managing all 3D printing needed.

<u>Certifications and Other Experience</u>

• Certified SolidWorks Professional – Mechanical Design (CSWP-MD)

Mar 2022 - Present

• CNC Machining Training – IACMI – The Composites Institute

Nov 2021 - Present

• Experience with AM machines (FDM, SLA, SLS) in professional, academic, and personal environments

Aug 2021 - Present

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