Noah McCoy

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Work Experience

Product Safety Engineer

Server Technology Inc (Legrand) - Reno, NV May 2023 to Present

• Deep understanding of standards and the standard development process for electrical equipment and how the standards apply to our products.

- Understanding of Certification process and various documents that go along with that process.
- Creation and monitoring of procedures for certain self certifications industry allows us to do.

• verifying that the PCBs, PCAs, housings, and unit as a whole conform the best practices (both industry and company) and conform to the relevant standards.

• Product review during design and various stages of production to make sure the product complies to standards but also with a keen eye for safety.

• Development of test procedures for certification process.

Electrical Engineer

Bruce Aerospace - Dayton, NV March 2022 to May 2023

• Designed and oversaw the certification processes for numerous lighting elements (ORCAD for PCB design).

• Significantly cuts costs through certifying new product through similarity analysis. This is a process of making a convincing written argument by comparing new designs to previous designs that have already passed testing, and asserting that they would perform either the same or better than the already tested models. If this document is approved by the relevant group it can be used in lieu of physical testing, which saves in the range of \$15,000 per device.

• Designed numerous lighting systems for aircraft both clean sheet and modified.

• Maintained and created documentation required by the FAA and airlines . This includes maintenance manuals, electrical load analysis, service bulletins, similarity analysis, test reports, user manuals, and drawing packages to name a few.

Electrical Engineer

Nevada Automotive Test Center - Reno, NV May 2015 to March 2022

- Proposal research and proposal writing
- Test and validation plans
- Request For Information (RFI) documents
- Conducting trade studies doing weighted analysis based on derived metrics
- Developing a product/vehicle based on the results from the trade study, outlining why each decision
- was made clearly, so the customer is confident in our decision
- Project Design

- Schematic and Harness design
- PCB schematic design (Orcad)
- Panel selection/creation
- Flowchart/logic design
- Bench testing
- · Creation of a bench test document that lays out all metrics and goals
- Fabrication of bench in a rapid, but concise manner
- Simulation (either physical or digital) of feedback mechanism
- Development of detailed bench test plan with quantitative metrics
- Execution of test plan for bench
- Software in the loop (SIL) integration if needed
- Building of vehicle harnesses
- Familiarity with majority of civilian and military connectors (BNC, deutsch, amphenol, 38999, metripack, weatherpack, etc)
- Installation of product
- Conducting test plan designed in the proposal
- · Working with the customer to make changes based on their changed perspectives
- Advising the customer on changes based on our experience
- Instrumentation and Data Acquisition:
- · Keeping track of calibration certifications and calibrated assets
- Performing calibration procedures on various sensors using approved methodology
- Creating programs on various data acquisition systems (hbc, somat, vbox, megadaq)
- Running end to end validation checks on systems
- Reviewing and processing data after the fact
- Report writing

Education

Bachelor's in Electrical Engineering

University of Nevada-Reno - Reno, NV 2010 to 2016

Skills

- Open SCAD
- Project Engineering
- MATLAB
- Programmable Logic Controllers
- Python
- Proposal Writing
- C/C++
- Electrical Engineering (5 years)
- SAE J1939 (5 years)
- Pix4D photogrametry (4 years)
- 3d printing (3 years)

- Arial Drone Operation (5 years)
- MBED/ARM microcontroller family experience (5 years)
- PIC programming experience (3 years)
- Troubleshooting electrical systems along with their potential interface to digital systems (5 years)
- Research & Development
- Linux
- PCB design
- Sensors
- Instrumentation
- HMI design
- Data acquisition
- Bench testing
- ORCAD (1 year)