

Zakkere McCartney

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Summary

Detail-oriented and meticulous electrical design engineer with 5+ years of experience in troubleshooting electrical faults, reviewing design schematics, and reading layouts. Highly proficient in lab bench testing, lab equipment management, and project management. Skilled in coding, circuit design, and failure analysis. Driven in improving internal processes and procedures to increase engineering efficiency and accuracy.

Skills

Certified IATF 16949 internal auditor, Certified ISO9001 internal auditor, Python 3 Certified, PFMEA Certified. MATLAB, PCBA Design and Validation, Project Management, Failure Analysis, Lab Testing, Coding, Lab Equipment Management, HTML5, CSS, JavaScript, CAN communication.

Experience

Electrical Engineer

Amphenol Advanced Sensors • Saint Marys, PA

01/2021 - Present

- Guided a cross-functional team, by providing constructive feedback, to deliver projects on schedule and within budget.
- Developed Python applications, to connect various pieces of lab equipment, increasing efficiency by decreasing validation time.
- Managed new product introduction, from an engineering perspective, for implementation, timeliness and completion.
- Effectively communicated design concepts, validation strategies, and corrective measures, through presentations, reports, and direct communication to stakeholders, ensuring clear and consistent communication throughout the design lifecycle.
- Designed electronics used in the harsh environments demanded in the automotive and industrial setting.
- Prototyped new circuit designs simplifying the current design from 4 main components down to two.
- Optimized circuits across a wide range of temperatures using DFMEA design techniques.
- Review and optimized firmware for various microcontrollers necessary for cost out and design improvements.
- Experience with multiple semiconductor devices using I2C, PWM, SPI, UART, OWI and CAN communication.

Supplier Quality Engineer

Amphenol Advanced Sensors • Saint Marys, PA

10/2018 - 12/2020

- Conducted Failure Analysis on customer returns, using lab equipment and FA techniques, identifying root causes and applying corrective measures.
- Completed engineering change orders, using an ERP system, to update BOMs with current components.
- Conducted both intercompany and external audits, using ISO 9001 and IATF 16949 standards, ensuring adherence to the standards in production.

Communication and Signals Supervisor

Norfolk Southern Railways • Harrisburg, PA

01/2015 - 09/2018

- Completed the Norfolk Southern Management program, through on the job training and coursework, to effectively organize and lead team members.
- Adhered to federal regulations, through direct supervision of team members, ensuring the proper operation of the signal system.
- Planned and executed assigned tasks, by managing a team of 20 employees, to achieve project milestones.

Education

Electrical Engineering

Penn State University • State College, PA