Hardware Test and Validation - Integration Engineering

Professional Summary

- Dedicated and detail-oriented System Testing and Validation Engineer with many years of experience in ensuring the functionality, reliability, and performance of complex systems.
- Proficient in developing and executing comprehensive test plans, conducting thorough validation activities, and identifying and resolving issues to meet project requirements and deadlines.
- Skilled in collaborating with cross-functional teams to drive quality improvements and optimize system performance.
- Understanding of wire harness manufacturing process and Expertise in flight test instrumentation sensors
- Design experience and shop floor experience at Boeing
- Understanding of electrical databases and electrical load analysis, and circuit protection devices.
- Understanding of aircraft-type wiring and components such as connectors, backshells, conduits, relays, switches, terminals junctions, and more.
- 10+ years of experience in Failure Analysis to Root Cause Analysis techniques and quality testing on complex and various types of electronics equipment. Perform failure analysis on analog and digital electronics equipment to root cause components.
- 5+ years in quality assurance engineering experience. Participated in design and specification reviews.
- 3+ years of data trending, data analysis and KPI reports. Supported R&D, Field Quality and Manufacturing environments.
- Identified issues that need resolution to ensure the safety and effectiveness of the products.
- Developed, updated documents and work instructions to assure problems properly tracking, resolving and solution. Implement corrective/preventive action and document resolutions as necessary.
- Able to review and validate product non-conformances and disposition type, quality procedures and engineering requirements.
- Ability to multitask and meet deadlines. Able to analysis to identify and evaluate the quality of products, operation and processes to Quality Management System requirements, applicable company procedures, contract requirements or government regulation.
- Knowledge of FDA Quality System Regulations (QSR), Quality Management System (QMS), ISO13485, ISO9000, ISO9100.
- Experienced with software tools such as DOORS, SAP, Agile, JIRA and MS Office Suite.
- Experienced working with Production and including Material Review Authorization (MRA), Materials Review Board (MRB) processes, supplier delegated MRB, and post-production review.
- Strong analytical skills, communication and problem solving. The ability to independently determine and develop an approach to various issues and problems.

Areas of Expertise | Key Strengths

- Electronics and Electrical Systems Troubleshooting and Testing
- Expertise in Catia V5 and Microsoft Visio
- AC/DC Power Systems and Converters
- LEAN Manufacturing and 5S Principles and Tools
- Failure, Trend, and Root Cause Analysis
- Quality Assurance Inspections and Reporting
- Process Documentation and Improvement
- Mentoring and Training Others
- Boeing Problem Solving Model (BPSM)

- Python Programming
- Linux Bash Shell Scripting & Administration
- Kali Linux Penetration Testing
- Cyber Governance, Risk Management & Compliance
- IoT and OT Security
- Risk Management and Incident Response
- Burp Suite Web Application Testing
- PCI DSS v4
- Automation/DevOps

Education & Training

- Master of Science in Cybersecurity and Information Assurance University (in progress)
- Master of Computer Science in Database Systems from Colorado Technical University 2014
- Bachelor of Electrical Engineering from New York Institute of Technology 1999
- PMP (Project Management Professional) Certification from PMI (Project Management Institute)
- AWS Certified DevOps Engineer Certification from Amazon Web Services

- Professional Certificate in Cybersecurity from MIT (Massachusetts Institute of Technology MIT XPRO)
- GRC Professional Certificate from OCEG

Boeing Work Experience

Lead Senior Aircraft Functional Test Quality Assurance, Renton, WA

10/2022 - Present

- Direct a team of skilled technicians in executing functional tests for aircraft components and systems, ensuring adherence to quality standards and production schedules.
- Develop and implement comprehensive test plans and procedures, collaborating closely with engineering and production teams to optimize testing processes.
- Conduct root cause analysis and troubleshooting to resolve test failures, reducing downtime and increasing overall system reliability.
- Implemented continuous improvement initiatives to enhance test efficiency, resulting in a 20% reduction in test cycle time and improved resource utilization.
- Train and mentor team members to enhance their technical skills and ensure compliance with safety protocols and industry best practices.
- Coordinate with cross-functional teams including engineering, quality insurance, and production to ensure test procedures met regulatory requirements and production schedules.
- Maintain test equipment and facilities, conducting regular calibrations and inspections to ensure accuracy and reliability.
- Coordinate with regulatory authorities and certification agencies to ensure compliance with industry standards and regulations.

Other Work Experience

Intel Corporation, Hillsboro, OR

2021 - 2022

LTD Integration Engineer Technician

- Supported engineering experimental design activities through integrated lot set ups, data analysis functions and helping to assist with research activities, IoT plan management, and project management of new product.
- Operated, maintained, and repaired specialized processing equipment inside a clean room environment.
- Performed operational tasks, preventative maintenance, and troubleshooting to determine problems with equipment used in the manufacturing process.
- Developed process specifications and engineering standards and Reviewed designs to present to program leadership.
- Conducted engineering tests and detailed experimental testing to collect data and assisted in process development.
- Built plans and coordinated with module engineering to forecast and execute experiments as well as lab work for analysis of experiments.

A1 Computer Networks, Houston, TX

Linux Systems Engineer

2019 - 2021

- Built and solved Linux production systems at scale.
- Fixed and addressed issues with Linux and TCP/IP network stack components.
- Analyzed and tuned UNIX / Linux kernel.
- Expertized systems maintenance, such as installing patches and fixes, space monitoring, file systems maintenance, performance monitoring.
- Collaborated across teams to run workloads and analyzed /debugged data.
- Built, automated and supported critical infrastructure supporting applications used across multiple teams.

Comcast Corporation, Houston, TX

Senior Field Support Engineer

2007 - 2019

- Involved in node segmentation and network engineering projects.
- Provided leadership, technical expertise/guidance while performing various operational functional tests.
- Conducted failure analysis using various tools including RF and digital instrumentation (Network Analyzers, Spectrum analyzers, Logic analyzers, Frequency synthesizer, Digital Multimeter).
- Developed and Maintained Electrical Schematics and Wire Diagrams.
- Analyzed the network for performance issues and suggested solutions.
- Performed Project Scoping, Project Organization and Management including, Business & IT Requirements, Priorities, Project Execution Plan and Resource Plan.

Early Career History

<u>Time Warner Cable</u>, Houston, TX System Verification and Validation Engineer | Quality Assurance (6 years)

<u>Digital Network Associates</u>, New York, NY Network Design and Support Engineer (1 year)