

CHAITANYA KIRAN

Engineer

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SUMMARY

An accomplished and highly skilled professional with over 12 years of experience in various engineering roles.

CORE COMPETENCIES

- Design data analysis, Cloud tools and Minitab
 - Testing Management, Laboratory, Qualification plans, compliance, standards
- Design, FEA, CAD/CAM Solidworks, Siemens NX, Creo, Ansys
Sensor systems, electrodynamics, structural mechanics, CFD
Capabilities of EDshakers for shock, vibration, endurance tests

PROFESSIONAL EXPERIENCE

Innovative Consulting Solutions, Illinois Program Engineer

03-2023 to 10-now

As a data scientist worked on IoT systems, Statistical six sigma, Dashboards and Reports using Lucid Charts, Power BI & Tableau. Developed python workflows for supply chain data analysis, customer errors, etc.

Engineer - Toyota Material Handling

12-2022 to 02-2023

testing and certification and performance tasks for EVX257, ICX400 Toyota trucks including components, design and technical.

Developed engineering reports in graphs of vehicles, continuous improvement of maintenance procedures. Worked on battery truck charger system power supplies, power cables, relays and other components to the truck systems. Worked on EMI EMC qualification test plan for system verifications and validations. Replaced and troubleshoot parts based on EMI test results and develop maintenance repair plans, warranty documents, user manuals, Certification test results reports. Worked on correctness and reliability of the tests factors including Human factors, Accommodations and environmental conditions, Test and calibration methods and method validation, Equipment, Measurement traceability, The handling of test and calibration items

Netcom, inc (RF & Microwave design, mfg), Wheeling, Illinois

July 2020-May 2022

RF Component Engineer

- Worked on Crystal filters, Tunable filters, LC filters, Integrated assemblies, Amplifiers, test boards, etc. for HF/VHF/UHF.
- Bandpass filters of SMT type and developed test qualification plans to meet specifications. Parameters include insertion loss, IP3, Noise factors, solderability, power, shape factor, channels, speed, temp, manufacturability, productionability, packaging, etc.
- Created new enclosures that fit purpose in the field with radiation proofing, control and coolings, mounting types and design considerations, etc.
- Focused in Electromagnetic Theory, Transmission line theory, Waveguide, Microwave Network analysis, Amplifier Design, Impedance Matching and tuning, Microwave devices, Microwave filter, Basic antenna theory, HFSS design, CST design, Antenna Array, Dipole Antenna, Microstrip antenna, Yagi uda antenna, Helical antenna, parabolic antenna, log periodic antenna
- Accelerated R&D, Design, NPI, product development, test software & firmware requirements creation, BOMs development at system level, MFG processes strategize and standard based techniques for pristine products.
- Proven experience creating associated documentation specs, test plans, drawings (per ANSI Y-14.5), etc.
- Experience working under medical device regulations, such as ISO13485.
- Developed test stress profiles, inspection, sampling, standards include MIL 202, 810, HDBK 217, IPC A 610, ANSI Z1.9 etc
- Knowledge of Industrial Standards related to Audio Equipment, test measurements, compliance, reporting, etc.
- Leading teams to presented concepts of thermal cooling systems for Audio Measurement software suite Iso 18431-4, IEEE 1250, IEC 1000, EN60204, Shieldings, immunity, noises, db vs frequency plots, spikes and spurs resolving, Signal processing, Acoustic testing, Emissions, susceptibility, Iso9614 sound power, Shock test, RF systems, amplifiers, electromechanical systems.
- Presented concepts for IEEE 1588 equivalent standards for digital communications, ASIC test and memory logic testing, etc.
- Improve total business performance through sustainable implementation, LCA, reduce emissions, eco-friendly evaluations.

- KPIs, Monitoring, measurement, and review of internal processes of ISO9001, AS9100, NIST 800.
- Experience in quality APQP systems, ISO 26262, ISO 21434, FMEAs, SPC and RCAs of different products in the development and production stages. Investigate and implement six sigma strategies in problem solving.

NATIONAL TECHNICAL SYSTEMS, IL, TX, CA

May 2012 - May 2020

Test Engineer (2015-2020)

- Successfully completed a wide range of technical projects bringing them in on-time, designing and simulation of 3D models for structural housings for EMI, environmental, thermal cooling systems, safety sensors, air suspensions, and interfacing with technical requirements on technical timelines and required testing outcomes, qualification plans, compliance documents.
- Developed engineering reports in Battery failures. Developed SAE J1739 FMEA documents.
- Provided technical leadership in technical specific failure analysis test procedures and specification design, interpretation & performance of test methodology, verification testing on lab equipment, aggressively supporting the A2LA (ISO 17025) quality goals and test standards determination.
- Extensive work in test plans, failure evaluation, reporting UN/DOT Transportation Testing for Lithium Batteries, chargers, docking stations, and power accessories for Testing, Inspection, Certification, Auditing, Quality Assurance, Advisory
- Guidance of test activities in RTCA DO 160 for aerospace airworthiness plans, overseeing environmental qualification programs, preparing testing outcome reports, and the delivery of tight/synchronized scheduling and prioritization.
- Delivered experience and focused understanding of industry standards for engineering evaluation, testing, applied mechanics, validation of products and authoring testing and compliance reports.
- Successfully completed a wide range of technical projects bringing them in on-time, designing and analyzing 3D models for structural housings for EMI, environmental, thermal cooling systems, safety sensors, air suspensions, and interfacing with technical requirements on technical timelines and required testing outcomes.
- Product development and design prototyping in automotive US CAR standards, statistical testing, test profile generations, etc.
- Design engineer developing instrument panels, packaging, suspension systems, Mounts and mountings, System level designer, architecture design and technology integration services.
- Published qualification plans, procedures and reports for Aerospace products like microphones, headsets, using RTCA DO-160.
- Technical selling of test fixtures using Solidworks for all types of components AL 6061, Copper, Brass, Magnesium, steel, wood, plastic, etc.
- House calibration of Electrodynamics shakers, temperature chambers, HALT chambers, centrifuges, etc.
- Developed teams, technical leadership in technical vibration, shock, acoustic specific failure analysis test procedures and specification design, interpretation & performance of test methodology, verification testing on lab equipment, aggressively supporting the A2LA (ISO 17025) quality goals and test standards determination.
- Exhibited ISO 18431-4'' Signal processing, Srs analysis, Acoustic testing, Emissions, susceptibility, ISO 9614 sound power, Shock test
- Presented Business plans, Project management, EVM graphs, ROI for \$2M equipment's strategies.
- Product development & design prototyping for interior cabin, exterior lights, control instruments, antennas, safety systems, etc.
- Design engineer leading teams for developing instrument panels, packaging, suspension systems, Mounts and mountings, System level designer, architecture design and technology integration services, etc.
- Pioneered the project to automate the reporting process in Excel and visualized available materials vs scheduled quantity through logistics and inventory management to ensure 100% traceability of reports, failures, inventory.

Engineering Project Consultant (May 2012- Feb2015)

- Provided skilled solutions, environmental qualification programs, materials testing, laying out key project deliverables, developing project technical quotes. Take part in a pivotal role in equipment & new Laboratory setup.

BAXTER RELIABILITY LAB N.I.U., IL

May 2011-May2012

Research Associate

- Provided focused and disciplined engineering/research to determine the appropriate design margins.

EDUCATION

Solidworks, Ansys, Hypermesh, etc ISO/IEC 17025, ISO 9001, AS 9100 Auditor ISO 27K, Other ISO, IEC, ANSI etc standards

MS, NIU, DeKalb USA, 2012,

BE, Osmania University, Hyderabad, India, 2010

