

Radhika Ravindran

JUNIOR VALIDATION ENGINEER – RCA, Electronics Testing, & Lab Equipment Proficiency

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SKILLS

- **Test Tools & Lab Equipment:** Oscilloscopes, LCR Meters, PSUs, Signal Generators, and Surge Testers.
- **Programming & Scripting:** Basic Python, Basic MATLAB, Basic C, SQL for queries, sensor logic checks.
- **Quality & Validation:** RCA (Fishbone, 5 Whys), DMAIC, FMEA, SPC, ISO 9001, Life Tests, Visual Checks.
- **Documentation & Tracking:** Excel logs, Jira defect reports, RCA summaries, and SOPs for test processes.

WORK EXPERIENCE

Data Classification Associate

June 2022 – March 2023

Numerator Pvt Ltd

India

- Labeled and validated over 200000 digital ad records, improving tag accuracy across 150+ FMCG brand logs audited in repeated detailed cycles with feedback loops coordinated between QA leads and classification teams.
- Identified 120+ labeling errors across weekly audits, updated procedures, reduced major rework time by 22%, and corrected misclassifications by cross-verifying class structures with QA inputs and detailed SOP checklists.
- Partnered to reach 105% of monthly output targets for 9 straight cycles by routine closing batch tagging within 2-day SLA limits, maintaining consistency across evolving input formats and global brand-specific tagging needs.

Quality Assurance Engineer

May 2019 – May 2022

Techno Electromech Pvt Ltd

India

- Partnered in 1100+ inspections over PQC, FQC, PDI phases, ensuring all SMT boards met IPC-A-610 standards across 4 final assembly lines, and eliminating major fault recurrence in internal audits tracked by QA leads.
- Collaborated to eliminate 30% rework across 50+ disruptions by tracing root causes through Fishbone, 5 Whys, and DMAIC templates; presented trends to process heads using audit dashboards reviewed by compliance officers.
- Decreased final test errors by 25% after installing pre-QC test gates across 5 PCB work cells, standardizing handoffs, balancing coverage by technician role, and receiving internal QA recognition from Panasonic team.

PROJECT

RCA, CAPA & Six Sigma QA Improvement – SMT Quality

Individual Contributor, Remote

- Reduced assembly defects by 17% using SIPOC, 5 Whys, CTQ across 6 SMT issues based on audit and QA logs.
- Built detailed CAPA forms, audit templates, and tracked 40 issues using DMAIC flow and 8D tracking formats.

Smart Sensor Logger – Threshold-Based Simulation in C

Individual Contributor, Remote

- Simulated 500 sensor values, flagged 4 thresholds, logged faults, created detailed fault-free replay test outputs.
- Applied header-source separation to track logs and manually validate toggles in 3 code-reviewed test executions.

Vehicle Diagnostics SQL Analyzer – Log Pattern Flags

Individual Contributor, Remote

- Queried 12,000 ECU logs to flag idle loops and mismatches using defined time windows in SQL query logic.
- Mapped RPM, speed, and coolant sensor values to detect 5 faults and match logs with 98% precision rate.

CAN Protocol Simulation – Encoding & Fault Injection

Individual Contributor, Remote

- Developed 4 custom C tools to encode, decode, simulate 16 CAN-FD formats for validation under fault loads.
- Simulated 5 intermittent faults using checksum errors, DLC flags, and cyclic injections across 3 virtual buses.

EDUCATION

Master of Engineering in Electrical and Computer Engineering

May 2023 – December 2024

University of Windsor, Canada

Bachelor of Engineering in Electronics and Communications Engineering

August 2015 – May 2019

Gujarat Technological University (GTU), India

CERTIFICATIONS

- Master CAN Protocol, Python Bootcamp, Six Sigma Green Belt (AIGPE Accredited) – Udemy
- C Programming Masterclass: Pointers & Advanced C – Udemy
- SQL for Data Analysis, SQL for Non-Programmers – LinkedIn Learning
- Six Sigma Green Belt – Techno Electromech Pvt. Ltd.
- Learning MATLAB, Learning Jira (Data Center Edition) – LinkedIn Learning
- Programming for Everybody (Python Basics) – Coursera