MADHUMITHA BASKAR
madhubaskar572@gmail.com | 7305230328
LinkedIn

CAREER OBJECTIVE

Motivated and detail-oriented Software Test Engineer with over 2 years of experience in manual and automated testing, primarily in the automotive domain. Proficient in CAN diagnostics, Robot Framework, Python, Jenkins CI/CD, and automation scripting. Skilled in log analysis and issue debugging for infotainment systems (audio features including CarPlay and Android Auto), IoT devices, and real-time applications.

EDUCATIONAL QUALIFICATION

Bachelor of Engineering (B.E.) in Computer Science Engineering
Anjalai Ammal Mahalingam Engineering College, Thiruvarur — 2018 – 2022 — 80%
Higher Secondary (12th)
London Krishnamoorthi Matriculation & Higher Secondary School, Orathanadu — 2017 – 2018 — 70%
Secondary School (10th)
London Krishnamoorthi Matriculation & Higher Secondary School, Orathanadu — 2015 – 2016 — 85%

PROFESSIONAL EXPERIENCE

Consultant – Automotive Product Testing
Visteon Corporation (via Zilogic Systems Pvt. Ltd.)
Jan 2024 – Present

- Specialized in infotainment audio testing, including unit-level and CAN protocol validation.
- Developed test cases, flashed firmware, and debugged Android-based platforms.
- Performed signal-level analysis, defect tracking (JIRA), and resolved customer-reported issues.

Software Test Engineer
Zilogic Systems Pvt. Ltd.
Aug 2022 – Dec 2023

- Performed software and embedded product testing with a strong focus on CI/CD practices.
- Designed and executed manual and automated test cases; supported customer defect resolution.
- Managed CI pipeline tasks including build and testing automation using GitLab and Docker.

PROFESSIONAL PROJECTS

Infotainment Project: Škoda 2.5 and Tata Skylark (Ongoing)

- Tested infotainment audio features and reproduced issues via ADB log analysis with CPU memory logs.
- Automated test cases using standard tools and contributed to minor code fixes and builds.
- Supported CarPlay & Android Auto certifications through log review and compliance checks.
- Simulated CAN signals to validate audio functionality.

FORD FG4.3 Infotainment System

- Conducted product testing and unit testing and CAN protocol validation.
- Improved audio quality using digital signal and CAN analysis.
- Verified ESE, EVSE, and chimes using audio tools and oscilloscopes.

Automotive SOME/IP Protocol Validation

- Implemented the SOME/IP protocol for FreeRTOS+TCP to enable RPCs and event notifications in embedded systems. Testing was performed using a SIL setup with QEMU and Robot Framework.IoT Node for Monitoring Industrial Machines
- Created automated test cases and custom Robot keywords for SOME/IP features, with supporting Python documentation.

IoT Node for Monitoring Industrial Machines

- Developed and tested an IoT node for monitoring industrial machines via mobile app.
- Handled requirements, test cases, firmware flashing, log analysis, and Wi-Fi verification.

USB Relay & Switch Control

- Automated control of 8-port USB relay module and managed CI tasks via GitLab.

TECHNICAL SKILLS

- **Testing**: Manual, Automation, Unit Testing, Test Case Development
- **Tools**: Git, Docker, Jenkins, Android ADB, CANoe, Q-Fill, Vector Cast, Robot Framework, GTest, Renesas Programmer, Saelae ,Audio Precision, ATS,jira and x-ray.
- **CI/CD**: GitLab, Jenkins, Docker
- **Languages**: Python, Shell Scripting, C, C++ (Basics)
- **OS**: windows Linux (File Management, Process Handling, Scripting)

ACHIEVEMENTS & TRAINING

- Completed in-plant training in Web Development at Code Bind Technology.
- Certified in Java, PostgreSQL, and C/C++ by IIT-Bombay.
- Completed TCS iON Career Edge program and courses in Java & HTML/CSS.
- Attended workshops on AI, Cybersecurity, and Mobile App Development.

DECLARATION
I hereby declare that all the above-mentioned details are true to the best of my knowledge and belief.

Place: Tiruvarur
Signature: Madhumitha Baskar