**ARAVIND POTHULA**

Ph: +19402997873 | Email: [aravindpothula97@gmail.com](mailto:aravindpothula97@gmail.com)

**CAREER OBJECTIVE:**

Detail-oriented electrical engineer with 5.2 years of experience in managing different engineering operations, looking for a position at a reputable company. Capable of handling multiple projects at a time with minimum supervision. Motivated to offer the highest quality of services with complete focus.

**PROFESSIONAL EXPERIENCE:**

Working as a System Validation Engineer with **Akkodis Inc** from June 2023 to the Date.

**PROFILE SUMMARY:**

* Total 5.2 years of experience in the **Automotive Industry.**
* Experience in writing the **Test case design, Validation,** and Defect analysis of the Front Camera Module.
* Good knowledge of Vector tools like **Vector CANoe, CANDB++ Editor, CANape, EYEQclient, DSpace,** and **DPS.**
* Understanding of Complete Vehicle **Electrical schematics** and Communication Networks.
* Good experience with **GIT, Python** and **CAPL** scripting.
* Hands-on experience in standard protocols of **LIN, CAN and Ethernet(DOIP)**.
* Worked on **End-Of-Line/Key Off Load Diagnostics Testing.**
* Hands-on experience on **PTC (Integrity Client), JAMA, TestRail and Doors**.
* Good exposure to standard Protocols of **CAN and ISO14229-1**.
* Experience in System HIL Testing.
* Experienced on Dspace Automation Desk by generating scripts from the MITE tool.
* Involved in Various phases of Engineering via Analyzing Software Requirements, Test Specifications, Testing, Test Cases Development, Defect Raising, and Product Maintenance.
* Experience in performing Technical Reviews for Test cases and Test Reports.
* Strong exposure to Configuration management tools such as **Jira,** **SVN**, **PTC**, and **Doors**.
* Involved in Software Validation Releasing Activities.
* Good comprehension of Software Development Methodologies and Life Cycle Phases, well acquainted with **Automotive Spice (SYS 1,2,3,4,5) & GPEP** processes.
* Train new engineers and share knowledge with the other team members on different features.
* Built good communication skills with the customer as per daily basis calls and discussed requirements with the client for system-level understanding and covered all testable scenarios.
* A systematic, organized, and dedicated team player with an analytical mind determined to be a part of a growth-oriented organization.

**TECHNICAL SKILLS:**

* Language: C, Embedded C, C++, Python
* Standards/Protocols: LIN, CAN, UDS14229-1, UART, I2C, Ethernet(DOIP)
* CAN Tools: Canoe, Canalyzer, CAN db++Editor, and CANape, FORD-DET
* CAN Hardware: CAN Card, CAN Case, VN1630/5610
* DSpace Tools: Control desk, Automation desk, Motion desk, Model desk
* Configuration Management: MKS/PTC Integrity Client, SVN, GIT, TestRail, Jira, ECUTest
* Operating System: Win W7/W8/W10/W11
* Microsoft Tools: MS Office 365suite
* Hardware Tools: Relaybox, Loadbox, LCD/LED Panels, Camera modules, Harness, Simulators
* Others: IPG Carmaker, EyeQ Client, DPS, Multi Tool Renesas debugger

**ACADEMIC QUALIFICATIONS:**

* Master’s in electrical engineering from the University of North Texas is expected to be completed in MAY - 23.
* B.E in Electronics and Communication Engineering Osmania University with an Aggregate of 68.5% in 2018.
* Intermediate through the Board of Intermediate Education with an Aggregate of 89.7% in 2014
* 10th Standard through state board with an Aggregate of 9.0 CGPA in 2012

**Project 1: EOL/KOL Diagnostics Testing at HiL**

**Organization:** Akkodis Inc

**Client:** FORD MOTOR COMPANY

**Duration:** June 23 – Till date

**Project Summary:**

* As a System Software Validation Engineer at Ford, will play a crucial role in ensuring the reliability, functionality, and performance of the software systems embedded in Ford vehicles.
* My Primary responsibility will be to develop and execute comprehensive validation plans to guarantee that the software meets the highest quality standards, complies with industry regulations, and aligns with Ford's safety and performance objectives.
* System testing with Automotive Spice standards and GPEP process.

**My responsibilities include:**

* Requirement Analysis and reviewing the system requirements with the system engineer and understanding the system.
* Understanding the Electrical schematics of the vehicle
* Test case Design and test case authoring in ECUTest. Automate all the test cases and executed them using ECUTest.
* Setting up HIL Benches.
* Generating automated scripts and validating them through the ECU Test.
* Raised failure Jira Defects for software failures and supported software developers in analyzing the root cause.
* Automated the EOL Diagnostic Testing for upcoming programs like FNV4.
* Adept with the Test Management process and standards like GPEP and Automotive Spice (SYS 1, 2, 3, 4, 5).

**Environment:**

FORD-DET Tool, ECU Test, Canalyzer, GIT, TestRail, Python, Control Desk, Jama.

**Project 1: MPA Micro Plus2.0**

**Organization:** Navtech India Ltd.

**Client:** HANON Systems

**Duration:** December ‘20 – December ‘21

**Project Summary:**

* MPA is a Multi-Purpose Actuator and a part of an automotive refrigerant valve. Its job is to set the valve opening/closing position according to the given commands.
* We use different tools like LIN, MITE, and the Automation desk for test authoring and automation.
* System testing with Automotive Spice standards and GPEP process.

**My responsibilities include:**

* Requirement Analysis and reviewing the system requirements with the system engineer and understanding the system.
* Test case Design and test case authoring using internal tools like MITE.
* Setting up HIL Benches.
* Generating automated scripts and execution over Dspace Automation Desk.
* Defect creation and analysis with software developers.
* Test Session creation and test report generation for each Software release.
* Adept with the Test Management process and standards like GPEP and Automotive Spice (SYS 1, 2, 3, 4, 5).

**Environment:**

LIN, LIN Conformance testing, UDS 14229, Automation desk, MITE, PTC (Windchill RV&S Client).

**Project 2: Front Camera Module**

**Organization:** Navtech India Ltd.

**Client:** BMW

**Duration:** July ‘20 – December ‘20

**Project Summary:**

* BMW ADCAM is a front camera system consisting of a single ECU that has various functionalities like Cross-Traffic Alert, Left Turn Assist, Pedestrian Detection, and I brake which assist the driver to avoid collisions. The camera will detect the oncoming traffic with the help of sensors like Short Range radar, Mid-Range Radar, and Long-Range Radar.
* The project also includes the Validation of the new requirements which are initiated by the customer and the development of the test execution plan accordingly.
* We use Dspace (Closed Loop Hill) and Open-loop Bench Setup for the Execution using different tools like Canoe and Automation Desk

**My responsibilities include:**

* Analyzing the new requirements from the systems requirement document
* Writing new Test cases upon requirement changes and developing the automation scripts.
* Analyzing the reports and raising the defects
* Review of test cases and the requirements
* Generating new Test Procedures as per requirements and change requests.
* And involved in the meetings with the customer.
* Working with open-loop and closed-loop setups like HIL and Standalone bench setups

**Environment:**

CAN, UDS 14229, ISO-15765, Canoe, CANape, CAPL Scripting, Automation desk, MITE, PTC, Integrity, and Dspace Tools

**DECLARATION:**

I hereby declare that all the information mentioned above is true to the best of my knowledge.

Place: Michigan (ARAVIND POTHULA)