**SAIKRISHNA**

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H1B Details: SEP 2025



**Professional Experience**

* 10 +years of Automotive experience in different roles such as Test engineer, Software Tester, Advanced Engineer, Technical Lead and Validation lead.

**Expertise**

* Experience in Verification and Validation that **includes Hardware in Loop (HIL)/System Level/Component Level, Test for ADAS, BMS, Powertrain, ICC, Connectivity, Infotainment, Cluster and Telematics** ECU'S.
* Experience in **ADAS** Features: LSA, Collision Avoidance Assist I-Break, Front Camera View System for Automotive High beam.
* Experience in **Telematics** Features: Navigation, Voice Control, Data Upload, Data Vehicle Tracking, Vehicle health check, OTA/FOTA, Emergency Alert, Anti-Theft, E-Call etc.
* Experience in **Infotainment** Features: Bluetooth, WIFI, SPVR, SPCX (Android auto app, Car play, Car life and R&GO apps), USB, Navigation, Auxiliary sources (IOP MSC/Apple devices, IOP USB SD, Functional) Diagnostic, HVAC(climate system),Charging, UI settings, Steering column, Display UI
* Experience in **Cluster** Features: Telltales, Warnings/Alerts, Chimes
* Experience in **BMS** Features: Voltage protection, Current protections, Temperature protection, Safety, Temperature Protection, Charging, Discharging, Cell balancing, with cell balancing, without cell balancing discharge, with cell balancing charging, State of charge, State of health.
* Experience in Black Box, White Box, Functional, Manual, Diagnostic Testing of CAN LIN based Automotive Applications.
* Extensive knowledge of dSPACE SCALEXIO HIL Systems, NI Test end, ECU-TEST HIL Systems.
* **ISTQB** (Foundation Level) Certified Tester
* Knowledge of ASPICE Sys Level 2, ISO 26262 and automotive safety critical testing management
* Extensive knowledge of Diagnostic ISO 14229(UDS).
* knowledge on C, CAPL, MATLAB Simulink.
* Good Knowledge of V&V (Verification Validation), Agile, SDLC models, Testing Techniques, Testing Levels.
* Involved customer discussions in handling on any issues, dependencies, and risk management
* Involved in Test plan preparation, Test equipment procuring, project budget planning.
* Involved in Kickoff meetings, Sprint meetings, Audit Meetings, PO Meetings.
* Involved in Project management, Test Strategy, Test Schedules, Resource planning, Review of reports and customer communication.
* Worked as Test Coordinator from OEM to synchronize the test activities with different suppliers. Capable of handling multiple projects.
* Experience in Power train Diagnostics End of line testing.
* Vehicle Validation experience with OEMs & Tier1

**Skill Set**

* Programming Language: C, CAPL, Python
* Communication Protocols: CAN, Vector CANalyzer, LIN, UDS (14229), CAN FD, ETHERNET
* Debugging Tools: Lauterbach Trace32, V-Flash
* Automation Tools: dSPACE, NI Test stand,NI-Veristand, ECU-TEST.
* Hardware Tools: dSPACE Control Desk, Automation Desk, Soft car RT
* Requirement Tools: IBM DOORS,JAMA, POLARIAN, PTC INTIGRITY
* Configuration Tools: Tortoise SVN, JIRA, HP Quality Centre, IBM Rational Synergy, SBM
* Other Tools: LabVIEW, NI Max, PXI, UDE, DET, Plastics, DV tool, GIT API, Basic knowledge Jenkins, CI/CD, Pipelines
* CAN Tools: CANalyzer, Canoe, CANape, ETAS INCA, INTREPID Vehicle Spy, PCAN

**Projects and career**

**Sep 2022 to till date as Validation Lead at Fisker Inc**

**Project 1: ADAS (MRR(RADAR), CAMERA (FCM, RCM), HYDRA3 & Integrated Cockpit Controller**

ADAS Project is to perform active safety functionaries’ various features like LKA, LCC, ACC, TSR, BSD, DOW, CTA, FCTA, FCTA, ISA, WSP, TLR, DMS, AEB, APA, ELKA, LCA, Camera Views.

Bluetooth, WIFI, Navigation, HVAC, Audio, Warnings, Chimes, Telltales, steering column, music playback, CarPlay, charging, mirrors, drive modes, windows, doors, lights, gear indicator, Charge, UI settings.

**Environment:** Canoe, CAPL, Lauterbach Trace32, Jama, Jira, Vehicle Spy, ECU Test, ADB tool

**Role: Validation Lead**

**Responsibilities:**

* Handling the System testing (Sys.4) team.
* Interact with the counterpart and suppliers and requirements gathering, analysis and sprint planning, task estimation and task scheduling, monitoring, and controlling. And Mind map creation and send kick-off mail to counterpart and once testing done send a test closure mail to counterpart.
* Review all phases of test cases from the suppliers.
* Daily tracking the team status and project progress and inform to the project manager and counterpart.
* Coordinate with the development and testing team for fixing the bugs and quick solution/clarification.
* Create the test plan and test specifications (Sys.4) in Doors as per System requirements.
* Implement test cases as per test specification and execute Test cases, generate the test reports.
* Create bug Ticket in Jira and review the bugs.
* Mapping/linking the test cases to requirement is to test specification traceability in doors.
* Check in the Test script and Test report in PTC Integrity.
* Involved in Issue discussion with Development and system Team.
* Review of System test scripts and test specification and results.

**July 2021 to Aug 2022 at HCL Technologies**

**Project: ADAS-System Testing of Active Safety Domain Controller (ASDM)**

**Project Description:**

The Scope of the project is to test customer requirements in dSPACE Scalexio System with available different hardware's.

ADAS DAT2.0 is the latest advancement in Ford’s advanced driving system (ADAS). Ford DAT 2.0 consists of ADAS ECU controller and satellite sensors. Satellite includes: MRR, FWC (Front windshield camera), RVC, 4 SRR’s and Surround view camera, Ultrasonic sensors.

The goal of this project is to provide a Semi-Autonomous system to be used for various FORD vehicles.

**Features Tested**: Diagnostics, ADAS Requirements: XCP Communication related, PCAN, DIAG Related, Tree runner Micro Process Communication.

**Roles & Responsibilities**

**As a Technical Manager responsible for,**

* Test assigned vehicle features across the HIL test environment/System level.
* Develop test plans and follow guidelines set by test plan.
* Track software engineering, test processes and procedures and changes in RTC.
* Review application specification and create documents to identify the test scenarios.
* Requirements Management and Traceability Matrix.
* Understand the PDD Document given by customer.
* Upload test results into Polarian Tool.
* Responsible for Test case design, HIL testing, Automate HIL test bench set up.
* Coordinate with Customer, HIL and SIL team.
* Involved customer interaction with FORD DVPnR (Design Verification & Report review).
* Involved in Audit testing, HW Audit testing and update the detailed report to US & Indian management team.

**Nov 2020 – July 2021 at Navtech Consulting**

**Project: ADAS-System Feature Testing of Active Safety Domain**

**Project Description:**

The Scope of the project is to test customer requirements in dSPACE Scalexio System with available different hardware's.

LSA, or Lane Steering Assistant, is a camera-based driver assistant system which will guide the vehicle down the center of the lane, with or without steering input from the driver. The system can use lane marks on the road to find the center of the lane, it can use a vehicle ahead of it to find the driving path, or it can use a combination of both. The system requires that the driver be attentive with their hands on the steering wheel and be able to take over at any time. If the driver does not keep their hands on the wheel, there will be a series of warnings, which culminate in the vehicle stopping itself and LSA shutting off.

**Features Tested-** ADAS features (Collision Avoidance Assist I-Break, Automatic emergency breaking Automotive High beam)

**Roles & Responsibilities**

**As a Validation Lead responsible for,**

* Responsible for Test case design, Execution, Review
* Test assigned vehicle features across the HIL test environment.
* Test for systems in-house software or integrated software or hardware.
* Develop test plans and follow guidelines set by test plan.
* Enhance testing and project quality metrics by working with test engineers.
* Review application specification and create documents to identify the test scenarios.
* Requirements Management and Traceability Matrix

**Oct 2018 – Nov 2020 at Tata Technologies**

**Project Name- Telematics Functional Testing**

Telematics, Connectivity is the proposed advanced system for GMMC Project (GAC/Mitsubishi cars). The System is the most advanced system. The goal is to perform functional and System level Testing on these audio systems for the 20 features for Telematics and Connectivity, features like GMMC App (Account Management app), TBOX establishing a data communication channel through the USB and the DA, Navigation, Bluetooth, WIFI, Voice Control, Data Upload, Data Vehicle Tracking, Vehicle health check, OTA/FOTA Emergency Alert, Anti-Theft, E-Call etc.

**Role & Responsibilities**

* System Testing of telematics features.
* Requirement analysis, develop the test cases and testing for telematics features like Connectivity, Message push, Antitheft, Alert messages, Voice control, Navigation, Vehicle data upload, third party applications, FOTA updates…etc. as per customer requirement.
* Understand and Analysis the requirements.
* Develop the test plan as per requirements and Test case creation.
* Validate software using various testing tools.
* Test the ‘In Test’ Issues with latest Software’s.
* Hardware Calibrations, Hardware Upgradation.
* Work with System Engineers and Architects to test the features.
* Validate test results and Report Defects.

**# Project name: ADAS (Front Camera View System for Automotive High beam)**

**Description:** Adaptive High beam is a headlight control strategy that continuously automatically tailors the headlamp range, so the beam just reaches other vehicles ahead. It provides a continuous range of beam reach from a low-aimed low beam to a high-aimed high beam, rather than the traditional binary choice between low and high beams. The range of the beam can vary between 65 and 300 meters, depending on traffic conditions. In traffic, the low beam cutoff position is adjusted vertically to maximize seeing range while keeping glare out of leading and oncoming drivers' eyes. When no traffic is close enough for glare to be a problem, the system provides full high beam. Headlamps are adjusted every 40 milliseconds by a camera on the inside of the front windscreen which can determine distance to other vehicles.

**Role & Responsibilities:**

* ECU System Verification and Validation for single camera FCM (Front Camera Module).
* Testing of Features (AHBC and GFHB, Object detection, Lane Departure warning plus) ECU – Diagnostics testing, Diagnostics Verification Report (DVR).
* Responsible for all the Validation Plan requirement analysis in HPQC for Test cases & Design Steps.
* Software flashing activities and performing testing for new S/w releases.
* Responsible for analyzing reports through Report manager tool and uploading the result to HP-QC.
* BUG finding and testing the Bugs as per Customer requirement and logging the status in JIRA (Ticket Management tool) information to be shared to Customer and Supplier.
* Responsible for Debug/Rework for the sequence as per Validation Plan or for any change in the Pval.
* Working experience in Canoe, CANalyzer & CAPL as per project requirement.
* Enhanced Usage of Diag tool (UDS) for project related feature specifications such as Enabling feature in the ECU and changing all the vehicle related features.
* Testing the System w.r.t different vehicle types and different vehicle variants in different Sprints.
* Experience and understanding of vehicle level system Integration in terms of hardware.
* Performing Regression Testing and smoke test as per LIV s Request.
* Testing Must-fix Bugs/Issues as per LIS requests.
* Debugging or compiling Bench related Issues (Automation Bench).

**Apr 2017 – Oct 2018 at Altran Technologies (Renault Nissan)**

**Project Name-In- vehicle testing of VW\_MIB\_Global\_Gen2 infotainment system.**

A-IVI /ULC are the proposed radios for Renault & Nissan cars. A-IVI/ULC System Is the most advanced system which is based on distributed architecture the goal is to perform functional/IOP Validation on these audio systems for the features like Bluetooth, WIFI, SPVR, SPCX (Android auto app, Car play, Car life and R&GO apps), USB, Navigation, Auxiliary sources (IOP MSC/Apple devices, IOP USB SD, Functional) Diagnostic and HMI.

**Role & Responsibilities**

* Performed functional validation on audio system for the features like web-based application, Bluetooth, SPVR, USB, SPCX (AAP & CP), Diagnostic and HMI screens end to end validation on infotainment units.
* Experience in Bluetooth classic profiles like A2DP, AVRCP, HFP, HSP, PBAP, etc.
* Understand the requirements.
* Develop the test plan as per requirements.
* Responsible for Requirement analysis, Testcase design, Execution
* Validate software using various testing tools.
* Work with System Engineers and Architects to test the features.

**Jan 2013 to Nov 2016 at Suns Solutions**

**Project: DCDC 400 to 12 v DCDC Converter (BMS)**

**Project Description:**

The Scope of the project is to cover system requirements in SysRS DOORS/Develop Customer requirements into System requirements in a system layer for DCDC 400v/12v.

**Project: Battery Management System**

**Project Description:**

The range Battery management system is any electronic system that manages a rechargeable battery (cell or battery pack), such as by protecting the battery from operating outside its safe operating area monitoring its state, calculating secondary data, reporting that data, controlling its environment, authenticating it and / or balancing it.

**Project: Validation testing of Mega Audio car infotainment, Android apps Validation**

**Academic Qualification**

* Master of Technology in Embedded Systems from Vignan University in the year 2009 – 2011.

**International Experience:**

* Travelled to shanghai, China as a Business Visa for 3 Months Testing support in Client location.