

**Career Objective:**

To pursue a challenging career in an organization that gives me tremendous scope for professional improvement and gives me opportunity to contribute back to the organization and the profession to the best of my capabilities.

**Professional Summary:**

- Having **7+ Years** of professional experience in Verification and Validation (V&V) activities for Driver assistance systems in automotive domain.
- Experience on System level validation activities and expertise on Hardware in Loop (**HIL**) testing.
- Managing daily project team activities including progress of the teamwork, customer interactions, escalations and issues.
- Experience on test design and test execution, defect tracking and test reporting.
- Experience on requirement management tool like Rational DOORS, PTC Integrity.
- Knowledge on Caterpillar specific tools like CAT ET, CADet.
- Knowledge on Robert bosch specific tools like SCM, ALM, RADAR.
- Knowledge on Wabco specific tools like UDT, HTA.
- Basic Knowledge in test automation using CAPL Scripting.
- Knowledge on Diagnostic protocols like UDS (ISO 14229).
- Experience on communication protocols like CAN, LIN, Ethernet, CDL and J1939.
- Experience on testing tools like Canalyzer, Canoe, Canape, EXAM, dSPACE Control Desk and Automation Desk.
- Experience on configuration tools like Clear case & Well acquainted with all stages of V-Model.

**Work Experience:**

- Currently working for **HCL TECH** in Chennai, as Technical Lead Engineer from April 2021 to till date.
- Worked for **ROBERT BOSCH** in Bangalore, as Senior System Test Engineer from Jan 2019 to April 2021.
- Worked for **WABCO** in Chennai, as System Test Engineer from Oct 2015 to Jan 2019.

**Educational Qualifications:**

College/University	Degree	Specialization
JNT University	B.TECH (EEE)- Bachelor of Engineering	Electrical & Electronics Engineering

**Technical Skills:**

Domain	Embedded SDET, Automotive ST, HIL Testing
Programming Language	Basics of C and CAPL
Operating System	Windows 7, 8 and 10.
Communication Protocols	CAN, LIN, UDS, Ethernet, CDL and J1939
Tools	DOORS, Canalyzer, Canoe, Canape, PTC, ALM, SVN, JIRA, RTC, Clear Case, UDT, CAT ET, CADet, Trace-32, EXAM_V4.4, dSPACE Control Desk and dSPACE Automation Desk.

**Key Accountabilities:**

- Multitasking attitude and ability to motivate the team member as well as extensive knowledge of control System and Modelling Tools.
- Participate on teams through supporting and independent tasks.
- Positive attitude to experimental work verification and validation.

## Professional Experience:

### Project #1: Automotive L6 System Level Verification & Validation for CAT\_OHT (Off Highway Trucks).

**Description:** OFF Highway Trucks are used in Mining Industry to transport Goods from one location to another. Chassis ECM acts as the Master ECM which Integrates many different functions and interacts with Brake ECM, Network ECM for getting the inputs. All these ECM are connected to Several CAN and CDL Channels which reads sensor values and control actuators such as engine speed, Transmission upshift and Downshift, Payload and Various other features of the vehicle. CAT ET tools is used as diagnostic tool to trouble shoot faults in cable and Components. Different models of OHT like 777,775,772,770 are simulated in the HIL Test bench.

#### Role & Responsibilities:

- Analysis of Requirements, Preparation of Test cases based on the requirement documents and updating of Test Specifications
- Preparation of test setup by flashing the build to be tested into the ECU's.
- Performing smoke test and regression tests.
- Development of Test Automation Scripts using Automation Desk.
- To perform manual test on Canalyzer with Load box and reviewing for the failure test cases.

**Environment:** dSPACE Control Desk, dSPACE Automation Desk, Load box, CANalyzer, CANape, CAT ET, CADet, CDL, CAN, J1939, Technician toolbox.

### Project #2: Automotive system level Verification & Validation for BOSCH\_Volkswagen BCM

**Description:** Body Control Module (BCM) is a central control unit which integrates many different functions. BCM is Connected to several CAN and LIN channels and read sensors values and control actuators such as lights, door locks, wiper, windows, mirrors, Remote access control and various comfort controls. An advanced diagnostics system is used trouble shoot faults in cables and components. The main functionalities include Central Door Locking, Remote access control, Exterior and interior lights, Wiper and Washer, Seat Heating Control, Climate Control etc.

#### Role & Responsibilities:

- Analysis of Requirements, Preparation of Test cases based on the requirement documents on DOORS and updating of Test Specifications
- Development of Test Automation Scripts using Automation Desk.
- To perform manual test on Canoe with Load box and reviewing for the failure test cases
- Reporting issues through ALM.
- Updating the results in test coverage tool.

**Environment:** dSPACE Control Desk, dSPACE Automation Desk, Load box, Canoe, DOORS, RADAR, SCM, CAPL Script, CAN, UDS, LIN, Test coverage tool and ODIS.

### Project #3: Automotive system level Verification & Validation for WABCO\_mBSP\_EBS (1.0)

**Description:** A Modular brake system such as used in electronic braking system (EBS) Which allows for exchangeability of the brake parts comprising the modulator. We have used two ECU's main ECU and pressure control ECU, main ECU is controlling the bench setup and pressure control ECU controlling the pressure. The main features like Halt brake, Standstill pressure, Roller test bench, External pressure demand, Auxiliary Parking Brake, HIL START AID, External Braking request, Auto hold brakes Etc...

#### Roles & Responsibilities:

- Based on the software requirements will have a requirement analysis PTC tool to check the feasibility of testing and writing the test cases for various features.
- Performed manual test execution using CANalyzer and CAN ape tools and reviewing for the failure test cases.
- Involved in Automation test execution using EXAM\_V4.4 tool.
- Performing regression tests, smoke tests.
- Updating test results in PTC and preparing test reports.

**Environment:** dSPACE Control Desk, PTC Integrity, EXAM\_V4.4, CANalyzer, Canape, Eclipse, CAN, UDS, UDT, HTA, Trace-32.

**Personal details:**

- Marital status : Married
- Present Address : Chennai, Tamil Nadu, India
- Languages Known : English, Telugu, Kannada and Tamil.

**Declaration:**

I hereby declare that the information furnished above is true to the best of my knowledge and belief.

Date:

Place: Chennai

Yours Truly,  
(Mohan G)