

SURYA PALANI

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Summary

7+ years of experience working in the automotive industry, Achieved With a track record of success at Validation, specializes in ADAS product, Powertrain, Infotainment and Telematics with **System testing, HIL testing, Vehicle Testing, benchmarking, Calibration and Tech Lead**. Outstanding analytical and problem-solving abilities, this expert is proficient in DSPACE, VT System, ETAS, A&D, CANoe and CAPL developed and evaluated innovative automotive technologies that improve vehicle performance and safety.

HIGHLIGHTS

- 7+ years of experience in HIL and vehicle validation.
- Expertise in ADAS, Infotainment, Telematics, and Powertrain ECU testing.
- Strong proficiency in dSPACE tools, Vector tools (CANoe, CANalyzer, CANape, VT System), and MATLAB/SIMULINK.
- Hands-on experience in automotive protocols: **CAN, CAN FD, UDS, XCP, Ethernet, LIN and industrial protocols**.
- Skilled in test automation using Python and CAPL scripting.
- Experience with requirements management and tracking tools like **DOORS, VI Sure, CodeBeamer and JIRA**.
- Proven track record in ADAS feature validation, benchmarking, and scenario creation.
- Recognized for automation excellence with **VP Award for Best Individual Performer** in RNTBCI.

Skills

- **DSPACE:** Control desk, Motion desk, Configuration desk and Automation desk.
- **Tracking:** JIRA, DOORS, GITLAB, SVN and Codebeamer.
- **Vector:** CANoe, CANalyzer, CANape, VT System.
- **ECU:** ADAS, Powertrain, Telematics and Infotainment.
- **ETAS:** INCA, Consult III+ and MDA.
- MATLAB/SIMULINK.
- **Scripting:** CAPL and Python.
- **Validation:** System, HIL and Vehicle.
- **Protocols:** CAN, UDS, CAN FD, LIN, Ethernet, and XCP.
- **Serial:** RS232 and RS485.
- **Scenario creation:** SCANer, dSPACE and IPG (Carmaker).
- **Modbus:** Modscan, Modsim.
- **BOSCH:** GST, DDT.

Work Experience

- 11/2024 - Current
 - VARROC**
Pune, India
 - Lead COC Engineer (HIL Tech Lead for ADAS and SVS/SVC)**
 - Handling a HIL and System team with 5 peoples.
 - **Scenario creation and review:** Creating a real time scenario with **dSPACE and IPG carmaker** for features like **ACC, AEB, FCW, PCW, LKA, LSS, DMS, SVS/SVC and TSR/OSP**.
 - Creating a test campaign and reviewing the System, HIL and vehicle validation results.
 - Benchmarked the ADAS products to validate the features like ACC, AEB, FCW, PCW, LKA, LSS, SVS/SVC and TSR/OSP.
 - Performed the calibration for ADAS and SVS/SVC cameras.
 - Developed a **CAPL script** for automating the ADAS features.
 - Implementing the products in Vehicle to validate the ADAS, Infotainment and SVS/SVC.
 - Consolidating all the Validation results like OK, NOK and BUG with tracking tools like JIRA.

- 03/2023 - 10/2024
RNTBCI
 Chennai, Tamil Nadu
Senior Engineer (HIL Validation Engineer and Tech Lead for SDV (ADAS))
 - Handling a System team and Suppliers with 10 people for Validation and Bench implementation.
 - Developed a VT HIL bench for SDV (ADAS) with components like **2848, 2816A, 5650 and 1670**.
 - Developed a CANoe configuration tailored to meet project demands.
 - Designed and implemented country-specific **ADAS scenarios with SCANer Studio** for all signs.
 - Test case development and review:** Created a test case for SDV **ADAS (ACC, AEB, FCW, PCW, LKA, LSS, DMS, SVS/SVC and TSR/OSP)**.
 - Budget Management:** Handled the CAPEX and OPEX budget for bench utilization.
- 04/2021 - 03/2023
Automotive Robotics India (Caterpillar)
 Chennai, India
Engineer - II (Industrial protocol validation)
 - Developed the test bench similar to the field with dSPACE to validate Read/Write operations from the Telematics ECU (PLE).
 - Industrial protocols (RS232, RS485 and TCP) validation** using Red Lion PLC, Allen-Bradley, Siemens PLC, MicroLogix.
- 07/2019 - 04/2021
 ANCIT Consulting Pvt Ltd
 Bangalore, Coimbatore
Verification and Validation Engineer
 - Developed the bench using CANoe for the adaptive cruise control system.
 - Develop or modify the CAPL scripting based on project needs.
 - Execute the test campaign in CANoe and create a JIRA if it's an BUG.
- 07/2017 - 05/2019
 SRM Technologies Pvt Ltd
 Chennai
Junior Programmer
 - Executed the test cases of **Cruise control, Idle stop and OBD in A&D HIL bench** to validate powertrain engine.
 - Automotive protocol enabling diagnostic systems to interface with ECUs for fault diagnosis and reprogramming.
 - Executed the onboard diagnostic test cases to validate OBD in system.
 - Executed read/write operations based on service requests using UDS protocol with various service ID's like **\$10, \$11, \$22, \$2E, \$2F, \$14, \$19, and \$31**.

Education

- Expected in 12/2027
 Chennai
MBA in Business Analytics And AI
 SRM University
- 12/2024
 Chennai
B.Tech in ECE
 SRM University
- 04/2017
 Chennai
Diploma in ECE
 Central Polytechnic

Certifications

ISTQB Foundation Level, ISTQB.

Awards

VP award for Best Individual performer, Automation using Python & CAPL.