

# RAJU KURABALLI

(NSQF Certified), Karnataka, Belagavi. 🇮🇳 02/Aug/1998  
8050986373 | mailto: kuraballiraju@gmail.com

 <https://www.linkedin.com/in/raju-kuraballi-2172b2249>

---

## Summary

- 3 Years, 6 Month of Experience in Automotive Domain where I've worked on various aspects of vehicle technology, including body control units, powertrain braking systems, This experience has given me a deep understanding of the complexities and challenges in this field.

---

## Experience In:

- HIL Testing  
SIL Testing  
Automation Testing.  
Manual Testing.  
Electrical Vehicle PowerTrain (E V ).  
PowerTrain Braking system.  
Battery Management System (BMS).  
Software Development Life Cycle with V&V.  
Script Development.  
CAN, UDS Protocols.  
Microsoft Office Suite: Word, Excel, PowerPoint  
AI Tool :DeepSeek,

---

## Tools:

- ECU TEST.  
Python.  
Git/GutHub  
ControlDesk  
Jira.  
dSPACE.  
Diag.  
Silver Tool(vECU)  
Project Loader(vECU).

---

## Organization

- **Cyient Limited.** Oct 2021 - Present  
Designation : System Integration & Validation Engineer  
Project Related: PowerTrain Electrical Vehicle (eDrive), ADAS, EV, BMS.  
Project Name: Charge Management & Energy Management Modules.

### Project Description:

This project involved validating the Charge Management Module (CMM) and Energy Management Module (EMM) for electric vehicles. The CMM focused on testing charging behavior in plugged/unplugged states, while the EMM analyzed energy distribution, including battery state-of-charge, thermal management, and driver demand response. The Vehicle Management Module (VMM) validated crash protocols (emergency shutdown) and driving functions like torque control and regenerative braking.

### Responsibilities:

- Conducted manual testing using Silver Tool to validate signal values and verify requirements before automation.
- Using Python scripts to automate test cases in ECU Test Tool, enhancing efficiency in simulating vehicle conditions and validating system behavior.
- Designed custom signal libraries and test packages using Python to replicate real-world scenarios for automated testing.
- Executed real-time validation on dSPACE HIL systems, ensuring seamless integration of CMM, EMM, and VMM with vehicle subsystems.
- Performed self-reviews of test results update to the team and closing Tickets,

Tools: ECU TEST, dSPACE, SILVER (vECU), Python, diag Jira. Git/GitHub, Matlab/Simulink.

- **Cyient Limited.**

1st Project 2021 - Aug 2023

Designation : System Integration & Validation Engineer

Project Related: PowerTrain Braking Systems, Safety Function,

Project Name: Electronics Stability Program (ESP),

Project Description: ESP is control and modulate the braking force applied to the wheels of a vehicle. Unlike traditional braking systems, We are using electronic Signals to communicate between the driver's input and the braking. This allows for faster response times, improved braking performance.

Responsibilities

- Conducted manual testing using ControlDesk to validate signal values and verify requirements before going to the automation.
- Using Python scripts to automate test cases in ECU Test Tool, enhancing efficiency in simulating vehicle conditions and validating system behavior.
- Designed custom signal libraries and test packages using Python to replicate real-world scenarios for automated testing.
- Executed real-time validation on dSPACE HIL systems, ensuring seamless integration of WSS, HBB, PS, TCS, DTc & ABS, with vehicle subsystems.
- Performed self-reviews of test results, update to the team and closing J-Tickets,

Tools: ECU TEST, dSPACE, Project Loader(vECU), Python, Jira. Git.

- **Ministry of Skill Development & Entrepreneurship, Government of India**

Internship, NSQF Certified Level - 3

Certificate No: CON/Q0602

Credential ID: PMKYYXTTZ030-3021/T990138XTC04033040934SCAN\_2209641,

Certified Assistant Electrician (NSQF Level - 3) by the Ministry of Skill Development & Entrepreneurship, Government of India. Successfully cleared the assessment with a Grade - C, demonstrating expertise in electrical systems and adherence to national standards.

---

## Education

- **Vishweshwaraiya Technology and University ( VTU )**

BE ( Electrical and Electronics Engineering ). #Karnataka, Belagavi

- **Pre University College Majalatti**

12th ( Science ). #Karnataka, Belagavi

- **SSLC**

10th VPH Hidkal. #Karnataka, Belagavi