

LIBIN ANDREWS

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Place: Pune, Maharashtra, India

Professional Summary

ISTQB-TTA Certified Automobile Engineer with 6+ years of experience in automotive testing, diagnostics, and OBD calibration. Specialized in HiL testing, test bench validation, and automation framework development for EV powertrain system testing and OBD calibration, ensuring BS VI Stage 1 & 2 compliance. Proficient in Python-based analytics, ECU flashing, and data-driven validation, optimizing efficiency and ensuring regulatory compliance.

Work Experience

Magna Vehicle Engineering

Engineer

Aug 2022 – Present

- Support in development of Python-based automation frameworks for HiL and Test Bench setups, integrating Jenkins, GitHub CICD, and monitoring tools to streamline system testing for electric powertrain (Motor & Inverter) applications using dSPACE Scalexio.
- Perform HiL testing and validation for the transfer case of an EU OEM using dSPACE D1009, MATLAB test scripts, and ControlDesk for manual verification. Lead automation initiatives to enhance testing efficiency and ensure compliance with technical standards.
- Independently manage client requirements, technical discussions, and project scoping. Conduct departmental training on Python, support team members in debugging and issue resolution, and contribute to interview processes.

Bosch Global Software Technologies (Payroll – Klaus it, Cyient)

Engineer

Jun 2021 – Aug 2022

- Skilled in On-Board Diagnostics (OBD) and Diagnostic System Management (DSM) calibration for powertrain ECUs and exhaust systems in M & N category diesel vehicles of Indian OEMs, compliant with BS VI Stage 2. Experience with SCR, DOC, and DPF monitoring, inducement strategies, and calibration tools like ETAS INCA, ETAS MDA, ETAS E-Handbook, TSim, and Busmaster.
- Proficient in real-time and virtual calibration, electrical signal validation, and CAN error stimulation using Busmaster. Experienced in supporting homologation and ensuring regulatory compliance through rigorous testing and validation on both vehicle and test bed environments.
- Developed Python-based tools for data extraction, analysis, and visualization to monitor DPF efficiency, leveraging libraries like Pandas, Plotly, and Jupyter Notebook for advanced diagnostics and calibration insights.

Force Motors

Graduate Engineering Trainee

Mar 2019 – Mar 2020

- Executed in vehicle diagnostics, root cause analysis, and performance evaluation across city, highway, and high-altitude terrains. Led zero-kilometer vehicle preparation, periodic inspections, and validation of new software and new test samples, ensuring BS VI Stage 1 compliance for M & N category diesel vehicles.
- Performed daily vehicle data mining using Bosch iTrams, applying data cleaning, feature engineering, and predictive modeling techniques. Conducted failure mode and effects analysis (FMEA) to identify potential engine performance issues and drive resolution through calibration refinements.
- Planned and executed fleet validation trials, monitored resource utilization, and ensured timely completion of vehicle testing activities. Effectively communicated insights and technical findings to internal teams, suppliers, and customers through detailed reports, presentations, and documentation

Hyson Auto sales pvt ltd

Warranty Coordinator

Aug 2017 – Dec 2018

- Led comprehensive vehicle diagnostics, ECU flashing, and OBD error monitoring while managing end-to-end warranty administration, goodwill approvals, and recall completions for Jeep, Fiat, and Abarth brands. Ensured compliance with FCA standards by authorizing repairs based on technical inspections, analyzing faults, and coordinating with technicians. Developed detailed reports and documentation to enhance service quality and streamline technical issue resolution.

Key Projects & Achievements

- **Certifications:** Professional Certification in Electric Cars, IBM Data Science, ISTQB Advanced Technical Test Analyst, Advanced Python.
- **Automation & Test Scripting:** Contributed to the development of automation frameworks and test scripts for system testing on HiL and test benches, supporting electric powertrain (inverter & motor) validation in high-performance electric cars.
- **System Testing & Validation:** Conducted comprehensive testing using MATLAB and dSPACE for vehicle components, including transfer case testing for 4WD systems
- **OBD Calibration & Data Analysis:** Performed OBD calibration and validation for BS VI Stage II heavy commercial vehicles at both vehicle and test bed levels. Executed diagnostics, calibration, and data analysis using Python to monitor efficiency, detect faults, and generate insights.
- **Vehicle Testing:** Executed fleet validation for Powertrain OBD at Force Motos, conducted OBD calibration and validation at Bosch, and performed user-level testing on after-sales vehicles at FCA.

Education

MBA – Project Management

Dr D Y Patil Vidyapeeth, CGPA – 7.58

Jun 2021 – Aug 2023

B-Tech in Automobile Engineering

Nehru College of Engineering and Research Centre, CGPA – 7.35

Jun 2013 – May 2017

Higher Secondary (Science)

St Thomas HSS Thope – Percentage – 76.6%

Jun 2011 – May 2013

S.S.L.C (Secondary School Leaving Certificate)

GHSS Peechi – Percentage – 86%

Jun 2010 – Apr 2011

Key Skills & Competencies

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|-----------------------------------|-------------------------|-------------------------|
| • Automation and Data Analysis | • Python | • Adaptability |
| • On-Board Diagnostics | • Matlab & Simulink | • Management |
| • Vehicle Fault Diagnosis | • INCA & MDA | • Problem Solving |
| • CAN, UDS Protocols | • Dspace & Control desk | • Self-Motivational |
| • J1939, ISO 26262, ISO 14229 | • Vector Canoe, Canape | • Presentational Skills |
| • HIL, Testbench, Vehicle Testing | • Trace Tronic ECU.test | • Team Work. |

Personal Details

- Date of Birth: 22/Jul/1995.
- Nationality: Indian.
- Marital Status: Married.
- Gender: Male.
- Passport: Available,
- Language Known: English, Hindi, Malayalam (Read, Write, Speak)

I hereby declare that all the information contained in this resume is in accordance with facts or truths to my knowledge. I take full responsibility for the correctness of the said information

Yours sincerely,

Place: Pune, Maharashtra, India

Date: 22/Mar/2025

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