

### **Shobhit E Bobin**

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# **Professional Summary**

Automobile Engineering graduate with 6 months of combined hands-on experience in vehicle servicing and quality inspection. Worked as a Quality Inspector at Hindalco's Personal Mobility Plant, Chakan, conducting weld quality inspections on battery mounting frames for Mahindra electric vehicles, ensuring structural integrity and adherence to industry standards.

Completed a technical internship at Popular Maruti Services, Kerala, gaining practical exposure to clutch replacements, suspension and brake servicing, electrical fault diagnosis, and crash repair procedures. Familiar with basic data tools like Excel, Power BI, Python, and SQL, with additional experience in technical documentation and process mapping.

Motivated to contribute to roles in vehicle R&D, quality assurance, or EV systems, bringing a practical mindset and a strong foundation in automotive technologies

## **Core Competencies**

- Automotive System Diagnostics & Preventive Maintenance
- Clutch, Brake & Suspension Repair Techniques
- Vehicle Service Operations & Workshop Safety Compliance
- Hands-on Mechanical Troubleshooting & Precision Tool Handling
- Team Collaboration in Supra SAE India Vehicle Project
- Spare Parts Management & Inventory Coordination
- Technical Documentation & Report Writing (MS Word)
- Data Analysis & Visual Reporting with MS Excel & PowerPoint
- Familiarity with Python, SQL & C++ for Technical Support
- Continuous Process Improvement & Quality Assurance
- Weld Quality Assessment & Defect Identification
- Technical Knowledge of EV Component Standards

# **Professional Experience**

#### **Quality Inspector**

Autocal Engineers, Pimpri-Chinchwad, Pune, Maharashtra | Onsite | July 2025 - Present

- Conducted quality inspections of weld joints on aluminum frames used for battery mounting structures in Mahindra Electric Vehicles (EVs).
- Ensured compliance with welding standards and quality control specifications through visual inspection, dimensional checks, and non-destructive testing (NDT) methods.

- Collaborated with welding and production teams to identify and address weld defects such as undercuts, porosity, misalignment, and incomplete fusion.
- Maintained detailed inspection reports, flagged deviations, and supported root cause analysis for recurring issues.
- Contributed to continuous improvement efforts by providing feedback to process engineers for better weld quality and consistency.

#### **Key Contributions:**

- Identified recurring weld defects and helped refine inspection criteria, leading to a measurable reduction in rework and quality rejections.
- Contributed to improving first-pass yield by ensuring early-stage detection of weld issues on battery mounting frames used in Mahindra EVs.
- Maintained clear and detailed inspection records that streamlined internal audits and supported traceability for critical EV components.
- Actively coordinated with welding operators and production engineers to address real-time quality concerns and suggest process adjustments.
- Provided structured feedback to improve welding practices, contributing to a reduction in common defects like porosity and undercuts.

#### **Service Technician Trainee**

Popular Maruti Services, Kattapana, Kerala | Onsite | Jan 2025 – May 2025

- Executed over 50 periodic maintenance services (oil/filter changes, air-filter replacements, tyre rotations) with zero rework.
- Assisted in complex mechanical repairs including clutch replacements, brake overhauls, and suspension arm swaps.
- Conducted electrical diagnostics—wiring harness removal, headlamp swaps, and battery/alternator testing—to resolve fault issues.
- Supported crash repair workflows by removing and refitting body panels, coordinating parts orders with insurance assessors.
- Enhanced workshop efficiency and safety through tool organization, PPE enforcement, and daily safety audits

#### **Key Contributions:**

- Introduced a torque-verification checklist for reassembled components, reducing postservice callbacks by 20%.
- Developed a tool-tagging system that decreased technician search times by approximately 15%.
- Streamlined the pre-service inspection checklist, shaving an average of 10 minutes off each job.
- Coordinated directly with the spare-parts team and insurance assessors to expedite part orders, reducing vehicle downtime by two days on average.

### **Internship Trainee**

Gokulam Tata Services, Thodupuzha, Kerala | Onsite | Dec 2024 – Jan 2025

 Shadowed senior technicians to complete 20+ routine inspections (oil changes, filter replacements, fluid top-ups) within two weeks, ensuring adherence to Tata Motors' service standards.

- Assisted in diagnostics of diesel engine performance issues using OEM scan tools, contributing to the identification and rectification of a faulty injector in a commercial vehicle.
- Supported brake system maintenance on Tata Xenon pickup trucks, including pad replacements and hydraulic bleeding, under direct supervision.
- Participated in wheel alignment checks and adjustments on passenger cars, helping reduce tyre wear and improve vehicle handling.
- Observed workshop workflow optimization and safety protocols, contributing to tool organization and PPE compliance to maintain a zero-incident work environment.

### **Key Contributions:**

- Assisted in the maintenance of a fleet of 100 vehicles during the internship.
- Enhanced team productivity by 25% by developing a new tracking system in Excel.

#### Education

### Bachelor of Engineering - Automobile Engineering

A.D. Patel College of Engineering | Oct 2021 – May 2025

#### 12<sup>th</sup> – PCM with Computer Science

Kendriya Vidhyalaya Sangathan, Painavu, Kerala | April 2020 – May 2021

#### **Certifications**

- Supply Chain Operations Rutgers University
- Ferrous Technology Pohang University of Science and Technology
- Mechanics of Materials IV Georgia Institute of Technology
- **Product Development using AutoCAD** Coursera Project Network
- Six Sigma Principles Kennesaw State University
- Inventory Analytics Rutgers State University of New Jersey

### **Technical Skills**

- Automotive Diagnostics & Maintenance Tools: OBD-II scanners, hydraulic lifts, wheel alignment & balancing machines, brake bleeder kits
- Data Analysis & Visualization: Excel (formulas, PivotTables), Power BI, AutoCAD, Creo
- Programming & Querying: Python, SQL, Django, C++
- **Documentation Tools:** MS Word, Visio, Draw.io
- Business Analysis Methods: Process modeling, root cause analysis, Agile/Scrum, UAT coordination

•	<b>Soft Skills:</b> Analytical thinking, problem-solving, stakeholder management, effective communication