



SUMMARY OF SKILLS AND EXPERIENCE

- An Advanced Driving Assistance Systems (ADAS) program Manager & result-oriented team leader with Masters (Automotive Engine technology) in IIT-Madras & with extensive experience in Powertrain too.
- 18 years of managerial/leadership skills with cross functional teams in multiple Automotive R & D domains including Tier1 Suppliers and End customers (OEMs)
- System Design Architect/Technical Architect and ADAS function Owner for Various ADAS features

Expertise/Skill set

- ⇒ ADAS & features of ADAS
- ⇒ ADAS Homologation for components
- ⇒ ADAS Sensors; LIDAR, USS, RADAR, Cameras
- ⇒ Automotive embedded systems both in ADAS & Powertrain
- ⇒ AUTOSAR
- ⇒ CAN PROTOCOL
- ⇒ ISO 26262
- ⇒ JIRA
- ⇒ MATLAB/Simulink
- ⇒ ASPICE
- ⇒ Application Life Management

Applications worked

Passenger cars Pick-up trucks, SUV,
Heavy Duty Diesel Engines
(Trucks, Marine, Genset, Construction)

Total Quality Management Practices & Tools

- ⇒ DFMEA
- ⇒ GANTT Charts
- ⇒ Fault Tree Analysis
- ⇒ Risk Assessment
- ⇒ VAVE
- ⇒ Design Verification plan (DVP)
- ⇒ Agile Methodology

Leadership Skills

- ⇒ Identifying the Key Result areas (KRA)
- ⇒ Monitoring Key performance index (KPI) for team members
- ⇒ Program/Project management
- ⇒ Design change Management
- ⇒ Handling team size of 32

Detailed ORGANIZATIONAL EXPOSURE

Magna Telemotive GMBH, Senior ADAS Specialist, Munich, Germany (November 2022 till present)

- ⇒ Development of ADAS Features Functional Requirements
- ⇒ Development of System Architecture Design for ADAS features
- ⇒ Features Worked on
 - a. Sentry Mode
 - b. Obstacle aware acceleration
 - c. Tailer Tow assistant
 - d. Surrounding View Camera
 - e. Camera Based Mirror Replacement
 - f. Lane Change Decision Aid System

Ford India Pvt Ltd (June 2021 till July 2022), ADAS Program Manager, Chennai, India

Entire ADAS Program Management using JIRA/ AGILE methodology & presenting the status of the ADAS Program to the top management on weekly basis.

- ADAS features homologation follow up
- ADAS hardware engineering and calibration follow up
- Ensuring all the tests are running as per Design verification plan (DVP) schedule
- ADAS S/W development Using JIRA,
- Consolidating engineering changes in Various ADAS features before introducing them into the Vehicle
- Features Worked on:
ACC, LDW, AEB, BLISS, RCTA, FCTA, 360 Deg surrounding view, Vehicle exit alert

**Automotive Robotics India, Deputy Manager, Product development & Engineering
Sep2019 till June 2020**

- ⇒ Conversion of wet oil sump engine to dry oil sump engine/Powertrain
- ⇒ Installation of hydrogen injection retrofit to reduce emissions and BSFC
- ⇒ Commissioning of Transmission dynamometer
- ⇒ DFMEA project on marine application diesel engines/Powertrains

**SM Marians (Exclusively Marine application “Diesel engines”), Kanyakumari, Tamil Nadu.
Manager, Engine R & D, Team size 32**

Jan 2018 to July 2019

- ⇒ Managing the entire operations from engine component quality to engine dispatch to end customer
- ⇒ Upgrading 427 hp engines to 500 hp engine by **turbo optimisation** as per customer demand.
- ⇒ Upgrading the 240hp engine to 350 Hp engine **using turbo and intercooler optimization**
- ⇒ Engine Component Drawings development through reverse engineering and necessary GD &T
- ⇒ Engine Rating certifications in ARAI as per company requirement
- ⇒ Reducing BSFC of the 180 hp engine by 10 % at both rated power and torque points.
- ⇒ Optimizing the wet exhaust manifold design to reduce engine water temperature

**Hero MotoCorp, Centre of Innovation and Technology, Jaipur Sr.Manager,
Mechanical function and Testing, Dec 2015 to Oct 2017(1 year 11 months)**

- ⇒ Gasoline Engine’s wide open throttle testing for proto type Cylinder head & port flow comparison
- ⇒ Gasoline Engine testing for mechanical efficiency calculations (Total engine & Component Break up)
- ⇒ Finalizing the testing standards and specifications
- ⇒ Designing for new evaporation system (EVAP) for emission control to meet the Euro 6 norms

Mitsubishi Heavy Industries-VST Diesel Engines Pvt Ltd, Mysore.

Manager, Design Centre (Team Strength-9)

March 2012 till Nov 2015 (3 years, 9 months)

- ⇒ Engine Development for meeting the Latest Emission norms (BS-III, CEV) & CPCB-II(Genset) emission TREM IIIA norms(tractor), homologation & type approval from ARAI.
- ⇒ Technical Support for Powertrain Indigenization/Localization
 - Coordinate Endurance tests –PreTest and After Test Inspections
 - Coordinate with Suppliers to meet the MHI Specs
- ⇒ CFT with Suppliers, materials and vendors
- ⇒ E-Bill of materials (BOM) finalizing and Issue to PPC.
- ⇒ Involving in meetings with IDEMA (Indian Diesel Engine Manufacturers association) regarding CEV emission norms policies
- ⇒ Regularly interacting with MHI, Japan R&D and act as technical bridge between MHI R&D and internal departments.

Caterpillar India Pvt. Ltd, Chennai through affiliate GGS tech pubs

Senior Engine Analyst, Engine Performance and Analysis.

Sep-2009 till March 2012(2Years, 6 months)

- ⇒ Tier IV (Interim and Final) emissions development (Heavy duty Diesel engines with CRDI technology) with US team support (worked on earth moving applications) and vehicle integrations.
- ⇒ Engine rating development optimization (Based on Design of Experiments)
- ⇒ 9.3 ltr engine SCR optimization & SCR dosing strategy
- ⇒ Emission optimization with EGR technology (Tier 4i)/ with SCR technology (Tier 4f)
- ⇒ Emission calibration for transient cycles including the Lean NOX trap (LNT) design & routing for meeting the NOX norms using Automotive embedded systems .
- ⇒ Authoring test Instructions as per the test plan.

Additional Responsibilities

- ⇒ Virtual test cell installation for the upcoming tests (Pro-E based)

Ashok Leyland, Chennai. Deputy Manager, Product Development

Tenure: Aug-08 till Aug-09

- ⇒ Value Engineering project for LCV engine
- ⇒ BOM analysis
- ⇒ Vendor development support
- ⇒ Test bed Installation (Along with AVL), Test cell layout, Instrumentation and Interface tools layout, Intake, Exhaust Layout, Dyno selection and commissioning

Cummins India Ltd, Pune.**Manager, Performance development****Tenure: Sep-06 –Aug-08**

- ⇒ Downsizing 8.3ltr engine to 5.9ltr engine to meet 160kVA, CPCB I compliant norms by Turbocharger modification. (Turbo matching)
- ⇒ 8.3ltr to meet 380 hp @ 2500 rpm for military application.
Calibration development (Using Cummins Specific S/W)
- ⇒ 5.9ltr to meet 180 hp @ 2500 rpm BSIII
- ⇒ 8.9ltr to 375 hp @ 2500 rpm BSIII
- ⇒ Value proposition project (Bench marking)

Rane Engine Valves Ltd, Chennai, India.**Senior Engineer, Engine Testing****Tenure: Jun 2004 till Mar-2006**

- ⇒ Responsible for conducting Value engineering tests and developing accelerated tests in the R & D department on a continuous basis.
- ⇒ Installation of new test bed with a SAJ eddy current dynamometer, AG 20 dynamometer
- ⇒ Value engineering project for performance comparison of two types of valves in a two-wheeler engine.
- ⇒ Construction of a test rig (special purpose machine) for Valve tip erosion measurement
- ⇒ Transient thermal & stress analysis of engine exhaust valves

ACADEMIC PROJECTS

- ⇒ Project Title: Thermal Analysis of Engine Valves/ Finite Element Analysis

EDUCATION PROFILE

Qualification	Year	Institution	Percentage/CGPA
M.Tech (Automotive Engine Technology)	2002-2004	Indian Institute of Technology, Madras	6.86
B.Tech(Mechanical)	1996-2000	KSRM college of engineering, Sri Venkateswara University	60.1
Intermediate	1995	Government junior college, Kurnool, AP	82
Secondary school certificate	1993	Kurnool public school, Kurnool, AP	82

Personal Achievements

- ⇒ Languages known: English, Hindi, Telugu (Speaking, reading and writing fluently), Tamil (can speak), German (Basic)
- ⇒ Author of “Bible, Bhagavad-Gita & Billionaires” (Available in Amazon, Flipkart)
- ⇒ 15 courses (Automotive Engine Technology) in **UDEMY live**.

