

CURRICULUM VITAE

Mr. Atul Ramesh Joshi.
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Lead Product Design Engineer.

Experience Synopsis:

Versatile achievements driven lead level position with 15 years experience in Product Design, Development & Engine System Integration with reputed international OEM companies.

- Leading a team of Design Engineers to carry out the development activities of diesel engines with peripheral components & power train integration projects deliverables.
- Experience in LDT & HDT Engine development & calibration.
- Experience in working on different vehicle platforms like LSV's, HCV's, tractor and defense applications with domestic & global customers.
- Proficient in preparation of technical queries, bid clarification, technical deviations and clarifications.
- Excellent project management and coordination skills in delivering challenging assignments on time with quality output.
- Resources run down planning for the projects. Allocation of the resources based on project schedule.
- Experienced in system/component designed & integration: Engine cooling system, Air intake system, Engine Exhaust & After treatment system, Fuel system, crankshaft, connecting rod, Piston, Rocker arm, Steering knuckle etc
- Experienced in preparation of variety of Design & calculations of crankshaft, connecting rod, Inlet/outlet manifolds, piston, back pressure calculations for exhaust & cooling system, Pressure drop analysis etc.
- Hands on experience in checking various detailed drawings of engine components, subsystem components such as air cleaner, radiator, piping layout, structural mountings layout etc.
- **Software Skill** : Creo-2, Pro/e- Wildfire-5, UG-NX 9,
- **Data Management Tools**: Team center PLM-PDM, I-LINK (3.3)
- **6 Sigma Tools** : DFA, DVA, DFMEA, PFMEA, Pugh Matrix for concept selection

1) Organization	: Cummins Technologies India Private Ltd.
Work Location	: Cummins India Ltd. Engineering R & D, Pune. (IOC).
Post Held	: Senior Product Design Engineer
Duration	: March 2016 till date

Job Responsibilities:

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- **Leading a team(s) of Design Engineers** for on time delivery with quality for design reviews and drawings release in to wind-chill request for VPC as well as VPI programs.
 - Review of design package , **DMU validation** , Project **Scope of work** report

- Checking and review of calculation templates, **BOM** etc
- Drawing checking of engine components , assembly drawings , Vendor drawings
- **Review** of various analysis reports like **FEA , CFD reports**
- **CFT interactions** with tech leads for resource planning considering the project deliverables
- **Coaching & mentoring** to engineers by adopting key learning's from BSO, TBWS trainings
- To ensure smooth progress of project conduction of standing meetings, one-o-one meetings.

Major Projects Completed / Achievements-

Stage VI after treatment system VPI program

- Design for 4 variant after treatment system layout
- Finalization of scope of work as per customer vehicle layout.
- Benchmark and component selection matrix.
- BOM preparation based on FEA, CFD report according to production phases.

Stallion series VPI program (common VPI for Engine & Genset)

- Benchmarks Architecture changes
- Architecture summary report
- SOW finalization with global CFT's
- DFM, DFA, DFMEA report preparation.
- Development of new components for Air Intake, Cooling system, Exhaust system.
- Interactions with CFT leaders, Suppliers
- Arrangement of training programs under capability development for team members

2) Organization	: Magnasteyr India Pvt.Ltd.
Work Location	: Engineering R & D, Pune.
Post Held	: Senior Design Engineer
Duration	: Sept 2011 till date

Job Responsibilities:

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- **Lead Engine designer** for **Heavy Commercial vehicle & special military applications.**
 - **Lead team** of total 4 design engineers, create work plan, prioritize tasks, ensure workload to team members
 - **Review of design** for Engine subsystems like Air Intake system, Exhaust system, Cooling system, Fuel system & components like Air cleaner, snorkel, radiator, intercooler, exhaust muffler, auxiliary water tank, Fuel filter, feed pump etc.
 - **Benchmarking** for the special purpose test methods **& integration technologies.**
 - **Coordination** with other aggregate owners **& CFT.**
 - **Coordination with customer, supplier & European counterpart** for component specification finalization, vehicle lay out, performance & testing.
 - **Use of Six sigma methodology/tools** like P diagram, DOE.
 - **Supplier reviews & discussions** for offer drawings, samples, quality, test reports etc.
 - **Review of 3D models, 2D drawings, GD&T, Tolerance stack up.**
 - **Release of 3D CAD data & 2D drawings according to BOM**
 - Use of tools/techniques like Brainstorming, DFA, DFM, DFS, DFMEA
 - **Project Lead** – Planning/Scheduling, Resource management, Data management
Weekly/Monthly reviews

Major Projects Completed / Achievements-

Design & integration of engine systems on special purpose military ALSV

- Design for the air intake & exhaust system.
- Design of piping for the air intake & exhaust system
- Packaging for fuel system.
- Designing of fuel lines for better aesthetics.
- Packaging of scavenging venturi connecting to air intake & exhaust piping.

Design & integration of engine systems in TATA prima 7548.S world truck

- Concept Design of Air intake Snorkel considering performance, style & vehicle architecture.
- Design of air cleaner mounting structure using weight reduction methods according to CAB articulation.
- Design & development of exhaust muffler as per European benchmarks.
- Design of piping for Air intake, Exhaust & cooling system.
- Design of snorkel & exhaust muffler mounting brackets.

LDT & HDT Engine development & calibration.

- 175/210 kw BS4 Engine performance & durability testing.
- Test bed set up with co-ordination between customer & test agencies.
- Endoscopy analysis of engine failure.
- Recommended design changes for engine components at teardown.

2) Organization	: Tata Technologies Ltd.
Work Location	: Tata Motors Ltd, Engineering Research Centre
Post Held	: Design Engineer
Duration	: Jan 2007 to Sept 2011.

Job Responsibilities:

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- **Lead a team** of 2 design engineers, Create team work plan, Coach & Develop.
 - **Review of design** for Engine subsystems like Air Intake system, Exhaust system, Cooling system & components like radiator, air cleaner, precleaner, muffler etc.
 - **Cross Functional Reviews** with Suppliers, Manufacturing, Assembly, Service, OEM integration.
 - **Review of Engineering drawings, GD&T** prepared by designers
 - **Release of 3D CAD data & 2D drawings** in PLM (Teamcenter)
 - Use of tools/techniques like Brainstorming, DFA, DFM, & Concept matrix
 - Efforts for standard procedure of DFS with document.
 - **Project Lead** – QMS, Data management, Planning/Scheduling, milestone reviews, Weekly update meetings
 - **Team Management** – Performance assessment, Skills Management, Project Development feedback, Action plan
 - **Organization Development** – Suggestion committee member for innovative idea.

Projects Completed/ Achievements-

Design & integration of engine systems in TATA Mine Protected Vehicle.

- Benchmarking for the new platform of military application & integration techniques
- Design & analysis coordination of engine subsystem components like Precleaner opening adapter, Fan shroud, radiator assembly mounting scheme, Air cleaner mounting,
- Design for failure issue of Radiator front shroud & aux tank mounting etc.
- Value addition for CFD of hot air recirculation issue for cooling system

Design & integration of engine systems on TATA LPS-4928 world truck

- Design & development of Air intake system for new aesthetic concepts
- Packaging of cooling system.
- Single point of contact for the CQD
- Cost reduction by 5% & Value Engineering (VE)

Communized integration of engine systems on TATA LPT/LPK2523 truck

- Detailing & BOM finalization for two different variants
- Co-ordinations with CFT & supplier for manufacturing & assembly.
- Complex (3D) dimensional variation analysis project report presentation.

3) Organization	: Bharat Forge Ltd.
Work Location	: Engineering CAD/CAM Devision, Pune.
Post Held	: Engineer
Duration	: May 2004 to Nov 2006

Job Responsibilities:

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- Development by 3D solid modeling using master model concept.
 - Design & development of forging dies.
 - Release of 3D cad data & drawings.
 - Feasibility & profile check by CMM.
 - Co-ordination with CFT for analysis, manufacturing & inspection.
 - Internal auditor for design process

Projects Completed/ Achievements -**Development of four cylinder crankshaft**

- Support for the weight balancing program.
- Die alignment on CNC to reduce the machining time by 2%.

Development of connecting rod

- Component Modeling & detailing.
- Design for the strength improvement by 20%.
- Design improvement for the complex area of finishing dies.

Design & Development of camshaft

- Component Modeling & detailing
- Angle variation study & profile selection of tappet valve assembly

4) Organization	: M/s Shree systems
Post Held	: Project Engineer
Duration	: June 2000 to May 2001

Job Responsibilities:

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- Involved in Fabrication and manufacture of hydraulic and pneumatic machineries
 - Sourcing & vendor development
 - Costing & estimation for acrylic components
 - Material purchase & SCM

Projects Completed/ Achievements -**Development of Fuel filling machine.**

- Site commissioning at Force Motors Ltd & Bajaj Auto Ltd.
- Preparation of development report using Auto Cad drawings

Development of Oil dispense unit for student training.

- Fitment of acrylic components for the valves, junctions & pumps

5) Organization : M/s Flow Control & Equipments
Post Held : Jr. Engineer
Duration : June 1999 to May 2000

Job Responsibilities:

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- Involved manufacturing of the valve components, orifices, nozzles, and taps
 - Time & Schedule planning
 - Material purchase & vendor development

Professional Trainings / Seminars –

- PLM-ProE Metaphase Training at Siemens (6 days)
- In house Training program on Time management (3 days)
- In house training on Presentation skills (4 days)
- Team building training program at Hotel Holiday-in (1 day)
- Certificate course on skills & communication ethics (1 day)
- GD&T training program at Tata Motors Ltd. (1 day)
- DFMEA training by Omnex (3 days)
- UG NX9 training at 3M software solutions. (5 days)

Educational Details:

Exam Passed	Year of passing	Board/University	% age	Class/Division
GRADUATION	2004	Chartered Engg.(I.M.E)	54	Second
D.M.E.	1999	B.T.E.	64.7	First
D.P.T.	1998	B.T.E.	62.1	First
S.S.C.	1995	Maharashtra Board	87.85	Distinction

Personal Details:

Address : Plot no 5, 'Rajeshree' Green Park, Sun city Road,
Anand Nagar, Pune – 411 051, Maharashtra; INDIA.
Date of Birth : 12 / 10 / 1979.
Nationality : INDIAN
Languages : English, Marathi, Hindi
Membership : Bharat Itihas Sanshodhak Mandal (History Research)
: Giridarshan Trekking club
Awards : Participated in District level swimming competition
Hobbies/Interests : Trekking, History research, Listening classical music.

I undersigned, hereby declare that all the information given above is best of my knowledge.

Place: Pune.

Date: / /2019

Atul Ramesh Joshi.