

## ACHUTHA

### B.E -Mechanical Design Engineer

Udupi, Karnataka, India-576121

Mobile: +91-7760485337, 9880412779.

Email: [achutha.1992@gmail.com](mailto:achutha.1992@gmail.com)

LinkedIn: <https://www.linkedin.com/in/ajith-achutha-sapaliga-06738b107>



### SYNOPSIS

- ❖ 7.9 years' experience in product design & development of automotive projects and various chassis, body & powertrain system for automotives. Also supported for CAD, PLM, PDM, operational support, manufacturing support, digital manufacturing, and data migration.

### AREAS OF EXPERTISE

1. Passenger vehicle body design
2. Sheet metal design
3. Structural components design
4. Powertrain compartment area activities
5. Powertrain systems and Packaging.
6. Cad data migration/Teamcenter

### TECHNICAL STRENGTH

- ❖ Part modeling, Sheet metal design for automotive, assembling of parts with detailing and drafting.
- ❖ Powertrain compartment area packaging and Installation.
- ❖ Design change or Engineering change request - ECR, ECO & ECN.
- ❖ Value Engineering changes (VA/VE), EBOM & MBOM generation
- ❖ Automotive body design, chassis frames design, bracket design and super structure design.
- ❖ Powertrain areas like Engine, transmission, coolant piping, radiator, fuel tank, fuel filter, surge tank, run box, hose pipe routing, fuel fill tube, dipstick tube, routing, engine & transmission mounting etc.
- ❖ Design & development of powertrain components and systems.
- ❖ Base engine and its surrounding systems like (Air Intake, Cooling, Exhaust and Fuel Systems etc.)
- ❖ Welding type, joints, Symbol and ASME Standards Y14.5 GD&T.
- ❖ Exposure to DFMEA, DFA, DFM and Tolerance Stack-up analysis and methods.
- ❖ Exposure to International standards like ASME, AWS, DIN, ASTM, API etc.
- ❖ Basic engineering hands on calculations.

### QUALIFICATION

Mechanical Engineering 2014(First Class with Distinction)	VTU 72 % (2014)	Alva's Institute of Eng. & Tech. Mangalore
--	--------------------	--

### SOFTWARE SKILLS

⑩ 2-D Drafting software:	AutoCAD, Solid works, Inventor, UG-NX and Catia V5.
⑩ 3-D Modeling software:	Solid works, Autodesk Inventor, UG-Nx and Catia V5.
⑩ Utilities:	Microsoft Office tools (Word, Excel, Power point, Teams, OneNote) Syteline, Adept synergy, Adept create, Vault, Team center

### CAREER EXPERIENCE

#### M/S TATA TECHNOLOGIES LTD, PUNE

Sept: 2021 to till date.

Mechanical Sr. Design Engineer

Type of Work: Permanent

Client- GILLIG (United States)

Tools Used: AutoCAD, Inventor, Nx, Catia V5, TC-12, Vault, Adept and Syteline.

Job Responsibilities: -

- ❖ As per REI (Request for Engineering Information) Creating parametric 3D Models using Basic & Advanced modeling techniques using the NX CAD tool.
- ❖ Creating design concept as per codes & regulations of USA standards.
- ❖ Creating environment data for feasibility study and accuracy.
- ❖ BOM (Bill of Material) preparation, Single Level and Multi-Level.

- ❖ ECO's (work on parts/sub-assemblies/assemblies that have engineering change from old ones or create new ones).
- ❖ Communication with the onsite engineer or client with PPT and other documents to resolve issues related to tasks.
- ❖ Bracket design, powertrain concept, hose pipe routing, selection of tube fittings.
- ❖ Using Syteline, Adept software's check and creating documentation
- ❖ Creating workflow in TC for peer review, processing, and release activities
- ❖ Team center Release Process Engineering documentation.
- ❖ Worked on following major areas:
  - 1)Low Floor Chassis (Front, center, and rear chassis)
  - 2)Side Framing and Roof Assembly
  - 3)Sheet metal brackets Design, Chassis Frames, Roof Sealing panels.
  - 4)Fire Suppression system, Surge Tank, Rear Run box panels, hosing, piping for powertrain system
  - 5)Installation of radiator, surge tank, CAC piping, Fuel tanks, Dipstick tubes, Fuel filter and Hose pipe
  - 6)CAD data Migration and Supporting on packaging and custom's data requirement in CAD dimensional information.

**Projects worked:** Propulsion system like Diesel, CNG, Hybrid Electric and Battery Electric

  - 1)Diesel bus -29', 35', and 40' lengths with optional BRT, BRT Plus, and Low Floor Plus styling
  - 2)Trolley -in 29', 35', and 40' lengths Diesel or CNG.
  - 3)Hybrid bus -35' and 40' lengths with optional BRT, BRT Plus, Low Floor.
  - 4)Low Floor -29', 35', and 40' lengths powered by Clean Diesel, Hybrid Electric, or CNG.
  - 5)Battery Electric bus integrates the Cummins electrified powertrain with Low Floor platform
  - 6)CNG- 29', 35', and 40' lengths with optional BRT, BRT Plus, and Low Floor Plus styling.
  - 7)BRT Plus 29', 35', and 40' lengths powered by Clean Diesel, Hybrid Electric, or CNG

**M/S GAYTHRI STRUCTURAL ROOFINGS PVT.LTD**

Sept: 2020 to Jan: 2021

**Mechanical Project Engineer**

**Type of Work: Contractual (Support Member)**

**Client: Mangalore Refinery Petrochemicals Ltd (MRPL), Mangalore**

**Tools Used: AutoCAD, Solid works.**

**Job Responsibilities: -**

- ❖ Attending technical meetings with Site Supervisor & preparation of project schedule.
- ❖ Study of complete Project, its related processes & Plant Layout for providing optimum solution.
- ❖ Making throughput and structural calculations.
- ❖ Technical support to Procurement/Purchase department, Installation & Service team.
- ❖ Keeping follow-up, guiding subordinates for their queries.
- ❖ Structural bench marking and measurement.

**M/s MG Automotive Pvt. Ltd. Belgaum, Karnataka, Design unit of West and Deccan.**

**Mechanical Design Engineer**

Feb: 2016- Sept: 2020

**Type of Work: Permanent**

**Tools Used: AutoCAD, Solid works, CatiaV5.**

**Job Responsibilities: -**

- ❖ Designing the bus body structures on different wheelbases.
- ❖ Making offer drawing, seating layout, and checking the layout drawing as per Automotive Indian Standard.
- ❖ Creating detailed mechanical drawings for piece parts and assemblies from CAD models
- ❖ Solid modeling and assembly of bus body structure & drafting, detailing,
- ❖ Design and work on Seat structure, complete seat, Head rest, seat mounting brackets.
- ❖ Releasing engineering drawings and bills of materials (**EBOM**) through **ECR/ECN/ECO**
- ❖ Making prototypes with the help of development team and on vehicle certification as per **AIS-52**
- ❖ Review and release of Bill of Materials for new product release in PLM.
- ❖ Preparing utilization of sheet metal in sheet cutting suite.

### Projects:

- ❖ Design of all school bus models --> worked for OEM projects of Ashok Leyland for their school & staff buses.
  - ❖ AL LCV, Export projects – Ivory coast from AL to South Africa, TATA LHD – School bus for Dubai.
  - ❖ Worked for luxury seater bus --> Glider (5950 mm WB) & Prism (Bharat Benz) for Autobahn, luxury sleeper bus --> Glider & Glider (Bharat Benz).
  - ❖ Worked as a support team member for --> Dreamz (Mercedes-Benz) project.
  - ❖ Worked as a support team member for --> Mammoth (MAN) project.
  - ❖ Worked as a support team member for --> Leera (Ashok Leyland) project.
  - ❖ Worked as a team leader for Glider – 36 berth projects.
  - ❖ MSRTC, SETC Govt. Project bus -6200WB AL and Tata Chassis
- 

### DRS Total Solution Pvt. Ltd:

#### **Maintenance Site Engineer**

**Client: Mangalore Refinery Petrochemicals Ltd, (MRPL), ONGC, Mangalore**

**Tools used: AutoCAD, Solid Works**

**Oct 2014 to Jan 2016**

**Job Responsibilities: -**

- ❖ Preparing the piping Layout, industrial design of pipe & modification of P&I diagrams.
  - ❖ Maintenance services to power plants like boiler penthouse preparation, piping preparation, sand blasting oil storage tanks painting of structures, pipe design, DFT Measurement, painting area measurement, project handling, sample collection etc.
  - ❖ Maintenance & calculate re design of pressure vessel, Heat exchanger.
  - ❖ site coordination regarding site clearance, payment certification, job completion report and joint measurement.
- 

### ACHIVEMENTS

- ❖ Received several appreciations from customers.
  - ❖ Developed a few new daily use calculation sheets in an easy and efficient way to use, with minimum lead time.
  - ❖ Received as an appreciation for contribution towards cost reduction materials.
  - ❖ Got “Certificate on College Leadership and Human Resource Development” (CLHRD)
  - ❖ Nominated as best employee for annual award.
  - ❖ Got appreciation for quick execution of many projects.
- 

### KEY SKILLS

- ❖ Demonstrated leadership capability and proven capability of driving project success individually and through teams.
- ❖ Highly motivated and able to work in a fast-paced environment.
- ❖ Broad understanding of current automotive terms and systems.
- ❖ A solid understanding of production planning and scheduling.
- ❖ Good communication and interpersonal skills.

#### Overseas Project's Handled

- ❖ Handled overseas clients from Malaysia, Thailand, Dubai, Oman, Ivory Coast, United States
- 

### PERSONAL DETAILS

- ❖ Date of Birth: 18<sup>th</sup> Nov. 1992
  - ❖ Gender: Male
  - ❖ Language Skills: English, Kannada, Hindi, Tulu
  - ❖ Hobbies: Playing Cricket, Volleyball, Swimming, cooking & listening to music
- 

### DECLARATION

I hereby declare that the above information is correct to the best of my knowledge and belief.

Place: Udupi (Karnataka)

Date:

(ACHUTHA)