
Career objective:

Resolute Mechanical Design Engineer, blending technical know-how with project management proficiency to meet often complex design requirements and facilitate project success with cost-effective design solutions.

Professional Experience:

I have over 2+ years of working experience with CAE tools like ANSA, Hyperworks, etc. with solvers working on Nastran, Optistruct, Abaqus and Ls-Dyna.

Current Organization:

RLE India Pvt. Ltd, Pune (RLE International Group) (From July 2023)

CAE Engineer and Junior NVH Analyst:

Client name: Henkel Adhesive Technologies Pvt Ltd.

Projects Worked:

1. TATA Punch X445 – (Project win): Developed a solution at A-pillar and B-pillar with optimal strength-to-weight ratio to meet the Static Door Stiffness target.
2. TATA Sierra X444 Tailgate – (Upcoming Win project): Bending Stiffness Improvement for a Tailgate assembly which is under gravity loading.
3. Renault R1324 BIW Model – (Upcoming Win project): Torsional Frequency and Static-Stiffness Improvement for a BIW assembly under torsional mode.

Roles and Responsibilities:

- Finite element modelling of Door trims, Closures and BIW trims for projects with bolt connections, spot welds, seam welds and adhesive contacts or rigid connections.
- Model preparation and debugging for the respective model. Maintaining includes structure with renumbering for large assemblies.
- To identify the weaker section for the BIW assembly under low-strain energy regions.
- Develop a voxel mesh at the observed cavity. Followed by topology optimization for insert development as per Topo shapes.
- Optimize the insert maintaining specified project targets.
- Performed a Design of Experiments for final thickness optimization under prescribed thickness limits.
- Maintain a tracker sheet for each project.
- Prepare a detailed report (PPT) and summary for the project to discuss with the Client weekly.
- Communicate with the CAD team for further manufacturable design development.

FEM Modelling includes:

- Finite Element Modelling of BIW Sheet metal and Plastic components of an Automobile using HyperWorks and ANSA Software.
- Solid meshing includes HEXA and TETRA meshing for hinges, baffles, etc
- Morphing of Inserts, BIW and Foam has been carried out as per Standard BIW cavity using Ansa for CAE internal study purposes. (Direct morphing and Box morphing).

Academic Projects:

- BE Final Year Project: FEA on Artillery Rocket system at ARDE, Pashan
Role: To validate the Propulsion system using FEA tools followed by 3D Hex meshing in Hypermesh while maintaining required Element Quality and Evaluating it in Ansys. Duration: 12 months
- ❖ BAJA SAE INDIA [https://www.instagram.com/resonance_racing_india/]
- SEASON 2022-2023 - Team Technical Lead and Senior CAE Engineer
Role: To guide and deliver my knowledge to the team.
SEASON 2021-2022 - CAE and Chassis Lead
Role: To design, simulate and validate the vehicle components using Engineering virtual tools.
We achieved the AIR 6 in CAE among 180 mBaja teams.
- Internship at Bhosari: Khethworks
Role: Manufacturing, Assembly making, and Testing, Duration: 6 weeks
- Internship at Bhosari: JIG TECH ENTERPRISES
Role: Quality Control and Inspection, Duration: 4 months
- Diploma Final Year Project: INDUSTRIAL STRATEGY MANAGEMENT
Role: Implementation of 5s methodology, Duration: 12 months

Educational Qualification:

Course	Institute & University	Year of Passing	CGPA/ Percentage
Post graduation	Birla Institute of Science and Technology	2026	-
DEGREE	All India Shri Shivaji Memorial Society COE, Pune	2023	9.32
Diploma	Government Polytechnic, Pune	2020	90.00%
S.s.c.	Dr (Mrs.) Erin N. Nagarwala Day School	2017	90.80%

Skills Set:

- Software:
 - Hyperworks (Certified)
 - ANSA (Certified)
 - COMSOL Multiphysics
 - Solidworks (Certified)
 - Catia (Certified)
 - Microsoft Office Tools (Excel, PowerPoint, Word)
 - Ansys
 - Python (Certified)
- Language:
 - English, German, Hindi and Marathi

Declaration:

I hereby declare that the above-mentioned information are true to the best of my knowledge. I assure you that I will discharge my duties to entire satisfaction.