RESUME

AKSHAY SUNIL BHAMBARE

B.E. MECHANICAL ENGINEER

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PERSONAL STATEMENT:

Looking for a Position as a Project Engineer and to work in a challenging environment for enhancing my skill both professionally and personally while contributing to the company's goal and objective.

SOFTWARE SKILL:

- Hypermesh
- Basic of ANSA
- MS OFFICE

WORK EXPERIENCES:

Worked as a Project Engineer (FEA Modeler) at **Future advanced technologies**, **Pune** with **1 year** Experience.

FEA Modeling:

Automotive (Element specification as per client requirements).

- 1-D Meshing: Rigid Connection.
- 2-D Meshing: sheet metal parts, plastic parts with difference thickness.
- 3-D Meshing: Tetra Meshing, Hexa Meshing.
- Type of Meshing: Midplane Meshing, Moldflow Meshing

Developed finite element models using HyperMesh software for various engineering projects.

Collaborated with the engineering team to understand project requirements and objectives.

Conducted meshing operations, ensuring accuracy and adherence to quality standards.

Prepared detailed documentation, including meshing procedures, for future reference.

Worked closely with engineers to make design modifications based on analysis outcomes.

Participated in project meetings and provided insights and suggestions for optimization.

Maintained up-to-date knowledge of industry trends and advancements in CAE modeling.

Projects: FE Modeling of Door Panel Components.

Project Overview:

The objective of this project was to perform meshing of Door Panel components using HyperMesh software. Meshing plays a crucial role in accurately representing the geometry and ensuring reliable finite element analysis (FEA) results. The project aimed to create high-quality meshes that captured the intricate details of the Door Panel components, facilitating subsequent structural analysis and simulation.

Responsibilities:

- Collaborated with the design team to understand the requirements and specifications of the Door Panel components.
- Identify the Door Panel components that require meshing. this may include the door carrier, map pocket, grab handle, switch bezel, arm rest, upper trim, waist rail, etc.
- imported the cad geometry of the Door Panel into HyperMesh software.
- Assessed the complexity of the Door Panel geometry and determined the appropriate meshing strategy.
- Conducted mesh quality checks to ensure that the elements met the required criteria for shape, size, aspect ratio, and connectivity.
- Utilized meshing tools in HyperMesh to automate the process and improve productivity.
- Prepared the meshed model for subsequent analysis, exporting it in the required file format compatible with the selected finite element solver.

Project Title: FE Modeling of Instrumental Panel Components

Components:

IP Carrier, Lower and upper IP, Glove box, Glove box cover, Ascent Bezel, Air ducts, etc.

Description:

- The objective of this project is to create FE model for Instrument panel using Hypermesh according to quality parameters set by customer.
- We have a specific general cell size to maintain, but we require additional accuracy near critical parts that, if adjusted through overall cell size, would be much too computationally expensive to simulate further procedures on generated mesh.
- A way to get around this would be to designate the area at or around the critical part with a higher refinement in particular region.
- This effectively decreases the cell size of only the target area but does not further increase the computational cost dramatically.

<u>Project Title: FE Modeling of Automotive Sheet Metal Parts</u>

Components:

BIW, Structure of Seating Assembly etc.

Description:

• The objective of this project is to create FE model for complete seating assembly & BIW parts using Hypermesh according to the guidelines and quality parameters set by customer.

Ball Drop Test On Plate

Solver: LS-DYNA

Objective: To find the structural integrity of the plate.

Description:

- We assign the velocity material properties to the appropriate component.
- In this project we find the deformation and stresses of the plate.

ZF India Pvt ltd. – **4.5 year experience of working as a Junior Engineer** in production to handle various types of CNC machines and spm to produce a part as per control plan and drawing for various machining operations like turning , grinding , honing , reaming , facing , threading , slotting etc.

STRENGTHS:

- I am an excellent team player, very effective at training or developing others.
- Positive Attitude.
- Hard working.

EDUCATIONAL QUALIFICATIONA:

- Bachelor of Engineering in Mechanical Engineering from Savitribai Phule Pune University with 62%.
- HSC from OJC college , sangamner with 60%.
- SSC from Saraf Vidyalay, sangamner with 70%.

PERSONAL DETAILS:

- Date of Birth: 28-01-1994
- Languages Known: English, Hindi, Marathi.
- Permanent address: Near madhav talkies, navale wada , sangamner dist. ahemdnagar

I hereby declare that the above stated information is true and best of my knowledge.

Date: your sincerely

Place: Pune (AKSHAY BHAMBARE)