ABHAY KUMAR OJHA

FEA Engineer

+91-9711121737

inkedin.com/in/abhay-ojha-53b7321a7

ojha25abhay@gmail.com

Key Expertise:

Overall experience 2+ years. Currently working at L&T Technology services, where my role is to perform shell mesh, Brick mesh and performing linear static analysis. Previously I work at Yatri motorcycle which is two wheeler EV start-up company, where my role involves performing structural analysis for chassis. Additionally, I am also responsible for vehicle dynamic analysis calculation.

Work Summary:

- Currently working as FEA engineer at L&T Technologies Services LTD.
- Able to perform Mid-meshing, Tet-Meshing for components with suitable Connections.
- Engaged with FE Model building related to Automotive domain for various requirements.
- Hands on working experience in Hypermesh, Optistruct, HyperView, Ansys, Abaqus.
- Experienced in FEA (Finite element analysis) for performing Structural analysis, Modal analysis.
- Checking displacement and von-Mises stress under various conditions.
- Evaluated the Factor of safety and calculated chassis stiffness.
- Provide critical location (HOT-SPOT) to testing team for physical testing.
- Prepared detailed reports documenting the FEA result analysis with multiple Iteration and improved case.
- Strong team player with problem solving and solution decision-making capabilities, coupled with good communication and interpersonal skills.

Software Skills:

	Novice	Advanced beginner	Competent	Proficient	Expert
CAE - Preprocessor	ANSA		Hypermesh		
CAE – Solver		Optistruct, Ansys, Abaqus			
CAE – Postprocessor			Hyperview		
CAD		Auto-desk Inventor, Solidwork			
Any other	Python, MSC Adams	Matlab			

Experience Summary:

- FEA Engineer, L&T Technology services, Bengaluru, Jun-23 to Present.
- FEA Engineer, Yatri Design Studio Pvt. Ltd., Budhanilkantha, May-22 to May-23
- GET, Sandhar technologies, Bawal-Haryana, Api-21 to May-22

Major Project Details:

Project 1:

Project	**138**	Duration	3 Months
		Team Size	1
Description	The objective of this project is to perform meshing (Shell and Brick) and check for penitiration.		
Role & Contribution	Role: FEA Engineer Contribution: • Meshing, Material assignments, contacts and connections. • Report generation. • Checking for Modal analysis		
Tools	Hypermesh / Abaqus		

Project 2:

Project	**P1 (Motor mounting)**	Duration	2 Months
		Team Size	1
Description	The objective of this project is to perform modal analysis of two-wheeler EV motorcycle to observe the behavior of chassis and motor mounting.		
Role & Contribution	Role: FEA Engineer Contribution: • Meshing, Material assignments, contacts and connections. • Calculate natural frequency for motor. • Design improvement and suggestions. • Report generation.		
Tools	Hypermesh / Optistruct / Abaqus.		

Project 3:

Project	**(P1) Structural Analysis of two-wheeler EV motorcycle**	Duration	5 Months
		Team Size	2
Description	The objective of this project is to perform Structural analysis of two-wheeler EV motorcycle to observe the displacement and stress of the chassis and find out stiffness and FOS (Factor of safety).		
Role & Contribution	Role: FEA Engineer Contribution: • Meshing, Material assignments, contacts and connections. • Evaluated the Factor of safety (F.O.S). • Checking for displacement and von-mises stress under various conditions like bump, cornering and braking conditions. • Calculated chassis stiffness during lateral, longitudinal, and torsional conditions. • Provide critical location (HOT-SPOT) to testing team for physical testing. • Performed vehicle dynamic calculation such as load transfer. • Design improvement and suggestions. • Report generation.		
Tools	Hypermesh / Optistruct / Abaqus.		

Project 4:

Project	**(P2) Structural Analysis of two-wheeler EV motorcycle**	Duration	5 Months
		Team Size	3
Description	The objective of this project is to perform Structural analysis of two-wheeler EV motorcycle to observe the displacement and stress of the chassis and find out stiffness and FOS (Factor of safety).		
Role & Contribution	Role: FEA Engineer Contribution: • Meshing, Material assignments, contacts and connections. • Evaluated the Factor of safety (F.O.S). • Checking for displacement and von-mises stress under various conditions like bump, cornering and braking conditions. • Calculated chassis stiffness during lateral, longitudinal, and torsional conditions. • Provide critical location (HOT-SPOT) to testing team for physical testing. • Performed vehicle dynamic calculation such as load transfer. • Design improvement and suggestions. • Report generation.		
Tools	Hypermesh / Optistruct / Ansys.		

Project 5:

Project	**(P1) Vehicle dynamics**	Duration	2 Months
		Team Size	1
Description	The objective of this project is to perform hand calculation.		
Role & Contribution	Role: FEA Engineer Contribution: • Calculate weight transfer during different condition like (during acceleration, Braking, Cornering) • Calculating force acting on front and rear suspension.		
Tools	Matlab		

Educational Qualification:

B-Tech	Lovely Professional University, Punjab (2017-2021)	7.68 CGPA
XII	Dev Samaj Vidya Niketan School, Gurgaon (2017)	72.6 %
X	Starex International School, Bawal (2015)	77.9 %

Hobbies:

Watching F1

Painting

Bike Ride.