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## CAE ENGINEER (STRENGTH AND DURABILITY)

Strength and Durability engineer by profession, with great interest in FEA, material and mathematical computation. Proficient in performing Linear, non linear, Fatigue, Modal and FRF analysis with great foundation of FEA, Structural, SOM, materials and manufacturing processes.

Ex formula student (FSAE) represent India in national (Formula green) and international event (FSAE Australia) as a vice captain and FEA engineer.

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## KEY COMPETENCIES

Hypermesh	Ansa	Optistruct
Hyperview	Simlab	Abaqus
Hypergraph	Ms office	FEA

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## PROFESSIONAL EXPERIENCE

### ESCORTS KUBOTA (Assistant Manager)

June 2023 - Present

#### Structural and Vibrational analysis of Running Board

- Analysis:- Non linear static analysis, Modal, Frequency response Function Analysis.
- 120 Kg load Applied at the Critical Location of running Board.
- Modal and FRF analysis Done for the frequency Range ( 25 - 104)Hz.
- Achieved the stress under the allowable limit with a FOS 2.5.
- No natural frequency is within the engine Frequency Range.

#### New Process Development for the Fork and sleeve Structural analysis.

- Developed the new process to perform the 75 Kg Load case for Fork.
- Coorelation of the Results with fatigue test data
- Load Bearing Capacity of Cental shift fork increases from 481 Kg to 787 Kg.
- Created the SOP for the Process for both 15 Kg and 75 Kg Load case.

#### Cost saving project of Integerated FAS Structural Analysis.

- Performed the structural analysis on Integerated FAS with pillow block.
- Achieved the FOS above 1 for all the 9 load cases ( Pin load, stopper hitting, accidental load, torture load, pull load 2WD, pull load 4WD, Kashipur load, Stone hitting, Transporting load cases.

### Tata Technologies (Senior CAE engineer)

July 2019-June 2023

#### Towkit analysis JLR (Jaguar land rover)

- Performed all the test analysis for DET, EDT and NAS towkit.
- Optimizing the result for both towing and recovery load case.
- Achieved 1% Plasticity and displacement target of 15mm.

#### Grab handle analysis using Abaqus

- Performed the inboard outboard and x pull test for grab handle..
- Achieved 1 % Plasticity for all the three layers of grab handle.

#### Model building.

- Model building for vinfast, tata mortors, HMCL and JLR.
- Model for durability, NVH, and crash.
- Used primer, ansa, hypermesh for the model build.

## **EDUCATION**

**B.TECH ( Mechanical engineering)**

Vellore institute of technology (VIT)

CGPA :8.51

**Class XII ( CBSE BOARD)**

PCM

Percentage-83.4%

## **INTERNSHIP**

Hero motocorp

May 2018 to June 2018

## **ACHIEVEMENT**

- Employee of the quarter for FORK project .
- Achieved the 8th rank in FSAE australia.  
President of automotive club.
- Secured 1st rank in formula green national level event.

## **LANGUAGES**

- Hindi
- English
- German