

Basavraj Sonage



Carrier objective

I have 4.5 years of experience in automotive crash and safety, specializing in product validation and regulatory compliance with FMVSS, ECE, and AIS standards. I'm proficient in using tools like Hyper Mesh, LS-DYNA, ANSA, and Opti struct to ensure structural integrity and safety performance.

Faurecia or Forvia Interiors System (1st March 2024 to till date)

Profile: CAE Analyst

Job Role Responsibility: Modal build and simulation activity [Crash for Energy Management, static for Weight for and Strength assessment] car interior

Head impact analysis on car's interior as per ECE R21 and FMVSS 201

- Performed the model build for car interior (IP, DP, CC) and Simulated head impact analysis on car interior
- Performed the simulation to evaluate the stiffness of IP, to achieve the OEM target and check rigidity of Cup holder and open armrest for CC
- Supported Client: BMW

Static and crash analysis Door Panel (DP)

- Performed the model build and simulation activity to evaluate the stiffness of 7door (FAT, CSD, SW, RWT) panel LHS and RHS. Proposed the improvement design to meet the OEM target
- Performed ball drop analysis at speaker Grill for different temperature (HT, LT, RT) to check energy absorption capacity of Door.
- Supported Client: Mercedes E VAN

Perform the simulation airbag deployment to understand behavior of instrument panel (WIP)

Yanfeng Automotive Interiors Technology (15th May 2023 to 28th Feb2024)

Profile: CAE Engineer

- Meshing and detail model build activity of car interior Product (IP, DP, CC)

Side Door Pole Impact Test as Per FMVSS 214

- Simulated crash worthiness of interior using explicit dynamic analysis to check for occupant safety as per FMVSS 214
- To maximize crush resistances offered by the side door and check max stress observed on intrusion beam

CTRINE ENGINEERING PVT.LTD. (1st April 2021 –30th April 2023)

Profile: GET Engineer

Rollover and static strength analysis of bus structure as per AIS-031 and UBS-II

- Performed explicit dynamic analysis on bus structure in roll-over situation to check for the intrusion in the survival space for passengers.
- Performed structural analysis on bus structure based on UBS-II requirement

Seat Static strength Test AIS023

- Performed meshing and complete model building of bus seat
- Load value calculation for adult and child seat and position H1 and H2 impactor
- To check seat structure resultant displacement and decided seat is stable or unstable.

Seat Belt Anchorage Test ECE14

- Performed quasi static analysis to ensure sufficient strength of seat belt anchorage at all point as per ECE14.
- Positioning the body block according to H point and Seat belt routing.

Educational summary:

BE - Mechanical from N.B. Navale Sinhgad College of Engineering, Solapur – 2019 – 67.7%

DME- from Bharamdevdada Mane Polytechnic, Solapur 2016 – 71.3%

12th-Sangmeshwar collage Solapur-51.20%

10th-Nutun High School Boral -62.73

Proficiency:

- Pre-processing : ANSA hyper mesh
- Solver : Ls dyna, Opti-struct, nastran
- Post-processing : HyperView Is pre post

Personal Details

- Name : Basavaraj Suryakant Sonage
- Address : At post Siddhapur, Tal Manglwedha Dist Solapur
- Date of Birth : 01-06-1995
- Sex : Male
- Nationality : Indian
- Languages Known : English, Hindi, and Marathi