CV

SUMMARY

- **CAE Professional** with14 years of experience in Japan working for automotive and Non-automotive companies like Mitsubishi Fuso, Nissan, Isuzu, Subaru, Toshiba, KUREHA,Tokyo Boeki Technologies.
- Currently Working with **TechnoPro Design Japan**, as a Technical Lead Analyst.
- Current responsibility includes growth of given account, delivery of given projects **(CAD/CAE)** With Exceptional results.
- Expertise in leading team **offshore/onsite**, developing new methodology as per project requirement for continuous improvement (KAIZEN METHODOLOGY).
- Worked with **Tata Elxsi Japan, as Associated Manager (CAE)** CAE group
- Worked with **TOSHIBA Corporation, Japan as LEAD Engineer (Quest Global Services Ltd).**
- Worked with **Mitsubishi Fuso Trucks & Bus Corporation, Japan as CAE Engineer/Bilingual Coordinator.**

STRENGTHS

- Expertise in **Finite Element (FE) modelling** and analysis of automotive & Non-Automotive structures like automotive suspension, chassis & full vehicle systems, Stator Coil, Runner Blades, Drone, Frack Plugs, Marine Loading Arm for **Strength, Durability, Fatigue, Crash** & other performance evaluation using CAE tools.
- Strong **technical skills** in Design Optimisation (using Hyperview Hypermesh); Meshing using Hypermesh, Patran, ANSA,Apex,MARC; CAE Calculation (using Solver, NASTRAN, ABAQUS and LS Dyna); and Report Creation .
- Expertise in BIW stiffness and Body Closure Stiffness, Strength and Durability Analysis for Full Vehicle (TRUCKS and Bus).
- Strong exposure in **Project Management, Continuous Improvement activities & delivering exceptional results.**
- **Global Experience – Japan, US, Germany, & India.**
- **Multilingual skills**, leadership, analytical and relationship management skills.
- **Adaptive learner** of Technologies and Languages.
- Awareness on AUTOSAR ARCHITECHTURE (Learnings ECU, ASW, RTE, BSW, MCAL, interfaces etc.)
- Awareness on Project Lifecycle Management.

Technical Skill Set

Pre/post-Processors	:	**Hyper Mesh, Patran, Apex, Ls Dyna Prepost, Hyperview, ABAQUS POST, LS POST (OJT)**
Solver	:	**Nastran, Abaqus, Patran, MARC, LSDYNA**
Design/ Graphics	:	**SolidWorks, CATIA V5 (Basics OJT)**
Operating Systems	:	DOS, UNIX, Windows 95/ 98/ 2000/ XP
Project management	**:**	**JIRA (Practising)**
Data management	**:**	**Excel, Microsoft SharePoint**

Experience Scan

Since Feb'2019 ~ Working with TechnoPro Design Inc. JAPAN, as Technical Lead Analyst (CAE)

- Reporting to Senior Project Manager.

Responsibilities

- Onsite coordination and Project Management for growth of given Accounts, Automotive, Non-Automotive.
- Receive Purchase order and Work order understand the customer requirements, understand the specification. Scheduling the work according to the priorities of the work as per customer requirements.
- Communicating the customer requirements to the offshore/onsite team and execute work at offshore. Analysing the risks involved with the stake holders during execution of the task.
- Give the estimation to the customer and start the work with acceptance. Clear the concerns of the team technically and If needed interacted with concern departments and vendors to solve the queries.
- Maintain the query log and Issue log for team reference. Do daily stand-up meetings to know the status of the Task and Track the task status to keep the deliveries on time with quality.

- Check the team productivity and quality regularly for continuous improvement.
- Report the progress and status of the Tasks to the customers and to the Reporting Manager in weekly meetings.
- Maintain the issue log for the issues if any.
- Creating workload simulations and predicting risks coming up and discuss internally to create mitigation plans for the risks.
- Do Project review for quality before delivery and deliver to the customer.
- Maintain the checklists and ensure the deliverables are as per customer requirements.
- Get customer acceptance and approval for the deliverables.

Major Projects:

Client – TBG Holdings.

Analysis of Non-Automotive component (Marine Loading Arm) :(MSc Nastran, Patran MSc Apex)

- Design Optimization,
- One Dimensional Element Analysis.
- Linear Structural Analysis.
- Static Loading Conditions including, Wind Load, Pressure Load, Earthquake Loads.
- Material used STEEL

Client – KUREHA Inc.

Analysis of Non-Automotive component (Hydraulic Frac Plug) :(Msc Marc, Mentat2020/Msc Apex)

- Non Linear structural Analysis to find strength and Stiffness in Plug.
- In order to find the nonlinear structural effect of plug, the model is simulated and analysed under various pressure loads and Boundary conditions to optimize the results and the calculated result is compared with actual test result. (Actual Pressure test on Plug at 30,60,90,90 minute's interval.)
- Material used is Carbon Steel, Aluminium, PGA, Magnesium, and Plastic Materials.

Client – ASTOM Inc.

Analysis of Non-Automotive component Propeller shaft (Drone Wings) :(Hyper mesh/Abaqus)

- Managed & executed the entire DRONE wing (1mmthick, 18inches Propeller) Assembly.
- To Study the practicality of wing geometrical structure, Pressure/omega load are applied, & model is analysed.

Analysis of Automotive Component Fuel Tank Assembly) :(Hyper mesh/Nastran)

- Strength Analysis (stress effect) of fuel tank including Mounting Brackets is carried out under the Gravity load 7G, the model is simulated and analysed for Natural Frequencies and found the mode shapes.
- Static loading Tank Load at lock removal condition.
- Strength Analysis is also performed separately to check maximum stresses on Tank Brackets

Analysis of Break Assembly :(Hyper mesh/Nastran)

- Vibration Analysis is performed and executed on Break Assembly.
- To ensure No Defects in Brake Assembly No squeal noise, the Entire Break Assembly is modelled and simulated for Strength Calculations to check the strength of each parts in Assembly and further
  Eigen Value Analysis is carried out on all brake assembly to check the mode shapes at Frequency of 1 Hz.
  Also with complex Eigen Value analysis ensured that no defects in Break components.

Since Jan'2014 ～ to Jan'2019 Worked with Tata Elxsi JAPAN, as Associate Manager (CAE)

- Reporting to Programme Manager.

Responsibilities

Client- Minori Solutions, Isuzu.

- Solely Responsible for Getting Projects from the Customer and Maintained the Growth of Given Account. (Ensure to receive continuous and maximum work for offshore team)
- Understanding customer requirements (As per the project)
- Preparing and Submitting Estimation to the client for approval.
- Project Management (Execution of the projects, Project Reviewing & Making deliverables).
- Team leadership (Management & guidance to team which includes Analytical Clarification).

Major Projects:

Analysis of Truck Cabin, Cargo, Truck & Bus chassis frame, Exhaust System Full Vehicle (Hyper mesh):

- Experience in FEM execution, including assembling Deck setup of Sub-system for Full Vehicle for Strength and Durability, Crash and Safety, and Vibration,Impact,Fatigue for linear and Nonlinear Analysis.
- Complete FEM execution on various, Truck Cabin and pick up CARGO, Passenger CAR, TRUCK and BUS. Entire **BIW structure, closures** etc.
- Specific guidelines and instructions are followed for **SPOT and BOLT** modelling.

- Experience in creating 1D elements like **nodal rigid bodies welds, Beams and Joints, Discrete Springs, SPOT WELDS.**
- Experience in creating all types of contacts for connection purpose using **HYPERMESH/ANSA**
- Experience in FEM execution with **Solid Hex mesh for Exhaust Assembly for Vibration Analysis.**
- Experience in Result calculation, Stress Measurement, Report creation and making deliverables.
- Provided counter measures for components to pass the Regulations and Client Specific Requirement.

Worked with **NISSAN Technical centre, Japan as Project Engineer (TATA Elxsi Japan).** In CAE Group, As CAE Analyst. (Short Term on Project requirement from Feb 2018 – April 2018)

- Responsibilities includes Complete FEM execution and Analysis, including assembling Deck setup of Sub-system for Full Vehicle **Crash Analysis**.
- Specially Executed Shell meshing of plastic parts including trims, Sunroof Trims, Door Trims using ANSA.
- Studied on Safety Regulations required for Model preparation for Impact Analysis (NCAP).

Since Sep'2011 to May'2013 with Toshiba Corporation, Japan as On-site Technical Lead Engineer (Quest Global Services Ltd)

- Reporting to Project Manager.

Responsibilities

- Solely Responsible for Getting Projects from the Customer (on-site).Understanding the customer requirements, Execution of the projects, Managing & guiding the offshore team including Analytical Clarification, Project Reviewing before delivering the projects to the customer.
- Worked on Generator Stator Coil End, Hydro Runner, and Stator Base for static Analysis.
- ***Contributions & Achievements-***Received C-SAT 87.5% for Generator Stator Coil End Project in May 2012.
- **Received OJT** for ANSYS software.

Major Projects:

- Performed normal modes analysis (Modal Frequency Analysis) of the Generator Stator Coil model at 0 to 200 Hz with a frequency step size of 0.2 Hz and identified resonant frequencies. Calculated stresses generated. Studied the Deformation Modes generated; and measured resonance for the given Model at applied frequency. Eigen values up to 200 Hz are to be computed.

- Conducted Static Analysis of Stator Base Model using ANSY Solver. The model is meshed with SOLID(HEX,TETRA) Meshing and Calculated the stresses generated in the model at applied given loading conditions.(Pressure load, Omega loads is used)

Also Expertise in FEM (Hex Meshing) of Components which includes Casing Assembly, Gas Turbine Compressor Assembly, Nozzle Assembly, Pole & Rotor Spoke Assembly.

Since Oct'05 to Aug'2011 with Mitsubishi Fuso Trucks & Bus Corporation, Japan as CAE Engineer/ Coordinator (Contract Employee – Sun well Inc.)

- Reporting to Group Leader.

Responsibilities

- Conducting Structural Analysis (Linear and Non Linear) using Finite Element Analysis and Hand Calculations.
- Making engineering judgements based upon analysis and test data & Handling various activities in the process including creating models, defining problems, developing analysis plans including loads & boundary conditions. Performing data acquisition & analysis data (new or historical), and maintaining complete record of all conclusions.
- Undertaking design reviews and participating in meetings prior to analysis, interpretation of results, Studying and selection of appropriate material for automotive applications, correlating the findings to analysis (CAE Results with Test Results), Carrying out potential failure causes and effect analysis.
- **BOM management using DMU**.

Contributions & Achievements

- Holds merit of successfully handling over 50 projects, both in independent and team-based environments,& Served as Key Personnel for managing CAD/CAE projects (both offshore & on-site).Also holds merit for delivering quality solutions on time & Received considerable appreciation from Group Members & Project Managers.
- Developed India, Germany and US Vendor's for CAD/CAE meshing and analysis projects with the help of technical & communication skills in (2006/01),Put forth an idea for Bridge Web conference; since communication since then it is being used successfully the type of bridge web/ teleconferences. Attended web conferences for better for better coordination.
- Regarding offshore deliverables, as per the projects created many Guidelines/standards for Chassis Frame analysis (09/2009) as per Fuso standards with the aim of maintaining quality of work and time consumption, which are being used successfully at vendor's side, Received Best Team player of the quarter (12/09) for

project Management. Completed the projects in order to maintain cost reduction by changing weld and connections. This also resulted in time savings, Gave suggestions for many counter measures as per the requirement according to the projects.

***Major Projects: (*TRUCK/BUS)**

- Successfully performed the Static Linear & Non Linear Analysis on Various Truck & Bus Components and Studied Damage calculations.
- Analysed various types of Chassis Frame and studied the Acceleration & Deformation Curves.
- Correlation of Analysis calculated CAE results along with the actual TEST results.
- Some of the Frame attached components Full Cab Bridge Assembly, Urea Tank Bracket and Attached Components like Stiffeners, Caps, and Front Suspension, Mud Guard System, Differential Carrier System, Stabiliser Brackets, Front & Rear Spring Hangers, & Urea Tank System Engine Mount Support etc.
- Performed Frequency response Analysis on Tailgate Assembly. Studied Excitation calculation.
- Performed normal modes analysis of the Fuel Filter model and also identified resonant frequencies up to 50 Hz.
- Made use of Modal Frequency Analysis for calculating effect and stresses generated; and measured Resonance for the given Model at applied frequency. Modal frequency response is run from 0 to 100 Hz with a Frequency step size of 0.2 Hz. Eigenvalue to 100 Hz are to be computed.
- Tools used **(Hypermesh/NASTRAN/ABAQUS)**

Expertise in FEM of Entire Vehicle including, Full Cab Assembly, front side, rear side, roof and floor for Durability and impact analysis as per the safety standards.

Education/Personal Details

- B.E. (Civil) (Nagpur-1998)
- **JLPT Certified** in 2009; **JETRO Certified** in 2005.
- **PMES Certified in 2020 from(Management & Strategy Institute)**
- **AUTOSAR ARCHITECHTURE Certified in Sep2021(UDEMY eLearning)**
- **Persuing PMP(Course completion).**

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