

RESUME

Personal Details:

Name: : **KIRAN KUMAR**
Date of Birth : 09-04-1988
Permanent Address : S\O VENKATRAJ BHAT
"SRINIVASA" BEHIND DHANALAKSHMI
CASHEW INDUSTRY, GANDHI NAGAR
MOODABIDRI-574227.
KARNATAKA.
Mob : **+91-8105306036**
E-mail : **kirankumar2741@gmail.com**

Objective:

To work in an organization, which uses my knowledge, skills for the development of its process growth, while giving me opportunities to learn, educates and enriches my knowledge. I am willing to work as a key player in challenging and innovative environment.

Work Experience – Total 10 Years

1) Company Name: Alstom Transport India Pvt Ltd, Bangalore.

Number of years: From May 2021 to till date.

Job Designation: Railway Dynamics Engineer.

Job highlights:

- Prepare Railway Dynamics Management plan
- To be able to synthesize the Track parameters and convert it to usable SIMPACK format for building the input parameters.
- Expertise in Analytical skills and identify the model error if any at early stage of project
- Modeling of rail systems in SIMPACK/VAMPIRE
- Understand characteristics of the suspension (springs, rubber elements, pneumatic suspension and shock absorbers).
- Analyze to check the train safety (flexibility coefficient, derailment, etc.) and comfort parameters to obtain the optimal solution.
- Propose design solutions on suspensions to the technical manager of the business to ensure a good dynamic performance of vehicles.
- Understand the dynamic requirements from tender specifications.
- Manage the Railway Dynamic calculations and report preparation.
Monitors test results from train validation.
- Responsible for giving clarifications to customer questions and resolve any issues.

2) Company Name: MSC Software Corporation India Pvt Ltd, Bangalore.

Number of years: 1 Year 9 Month, from September 2019 to May 2021.

Job Designation: Technical Specialist - System Dynamics (MSC Adams).

Job highlights:

- Work independently, with the Development team and with Sales personnel to provide product, business, and technical knowledge to support customers.
- Carrying out customer project related to System Dynamics
- Help accelerate the competency of customers through frequent visits, demonstrations, hand holding and implementation of projects in ASEN region.
- Responsible for conducting meetings, trainings, and tailoring communications to address business needs of existing and potential clients.
- Attendance at conferences and working with Subject Matter Experts, and research to stay on top of changes in business and technology

Projects Executed for Clients:

- Sunroof Mechanism simulation to find joint forces for structural analysis.
- Door slam Mechanism simulation
- Co- Simulation between Adams and Cradle (CFD software) for Door closing mechanism
- Door lock mechanism simulation
- Creating a truck leaf spring suspension template from scratch
- Perform KnC analysis on both Front and Rear suspension

3) Company Name: Tata Consultancy Service (TCS) Pvt Ltd.(EIS), Bangalore.

Number of years: 7 Years, from September 2012 to September 2019.

Job Designation: Vehicle Dynamics Analysis and Simulation Engineer.

Client: Jaguar & Land Rover (4 years), PSA group (3 years)

Job highlights:

- Vehicle Dynamics Simulation Experience with top U.K and France Automotive OEM for 6+ years.
- Hands-on experience on Modeling/Simulation, Parameterization of models for Ride and Handling characteristics, Load generation.
- Responsible for all vehicle dynamics OFFSHORE activities and deliveries.
- Green Belt Certified for Six sigma project.

Job Description:

- Managing Vehicle Dynamics OFFSHORE related activities.
- Vehicle Dynamics Analysis: Full Vehicle Handling, Ride, Steering, Suspension Characteristics (KnC) etc.

- Customization of the tool: Creating and implementing effective strategies to minimize time taken to perform a task.
- Coordinating with clients on new product development strategies.
- Gathering, collating, analyzing & documenting functional requirement specifications.
- Leading Project deliveries with no history of complaints.
- Monitoring and Reviewing tasks done by peers.

Projects Executed:

- Carrying out various simulations in SIMPACK and MSC Adams (Vehicle Dynamics Simulation Software) for different load- cases for the evaluation of Ride and Handling DVP's of different vehicle Programs of JLR and PSA(Steady state and dynamic CRC test, Steady state and dynamic Acceleration, Braking test, Fish hook ,figure of 8 test etc) and correlation with test results.
- Tuning of subsystem to match the test results.
- Load generation for durability and static analysis of PSA vehicle programs. (Static Service load and GAA Analysis (Using WFT forces from NATRAX and VRDE, RLDA tracks) using MSC Adams)
- Steering Characteristic analysis (Steering sensitivity, return ability, Steering ratio etc)
- RDNA(Ride) and SDNA(Handling) matrices generation for various vehicle Programs (Specific to JLR).
- Carrying out Static Vehicle Check (SVC) simulation for all the Vehicle Models.
- KnC Simulation for different Vehicle Programs.
- QSM model preparation.
- Model audit.
- Parameterisation of models.

4) Number of Months: 11 months (M.Tech Internship)

Company Name: Bangalore Integrated System Solutions Pvt Ltd (BiSS), Bangalore.

Job Profile: Mtech INTERN in Material Testing Lab from July 2011 to May 2012.

Job description: Specimens of **Tensile, Compression, Shear, Fatigue, Fracture, Creep**, pertaining to various grades of Steel, Aluminium, shape memory alloys, high temperature metals, elastomers, composites of fiber glass, carbon fibers, sandwiches, laminates and structural components have been tested and evaluated their properties with reports according to ASTM, AITM, ISO, and customer given standards.

Skills:

- **MSC Adams View, MSC Adams Car.**
- **SIMPACK (Multibody Simulation Software).**
- **Six Sigma Green Belt Certified.**
- **Undergone training on IPG Car maker.**
- **SOLID EDGE, CATIA V5, AUTOCAD.(Academic level)**

- **Ansys v 11(Academic level)**
- **Undertaking basic Matlab training.**
- Familiar with material testing of **Composites (fiber glass, carbon fibers), High Temperature Metals, Elastomers Automobiles and Aerospace components.**
- Familiar with performing **Tensile, Compression, Damping, Performance, Endurance, Fatigue (LCF, HCF), Fracture Mechanics (K1c, J1c, CTOD)**, tests on servo hydraulic test Systems.
- **C programming.**

Educational Details:

Mtech in “Computer Aided Mechanical Design and Analysis”

EDUCATION	NAME OF THE INSTITUTION	YEAR OF PASSING	CGPA OBTAINED
Mtech	Manipal Institute of Technology, Manipal	2012	8.64 Distinction

EDUCATION	NAME OF THE INSTITUTION	YEAR OF PASSING	PERCENTAGE OBTAINED
B.E Mechanical	Malnad College of Engineering, Hassan	2009	72.28% Distinction
P.U.C	Alva’s Pre-University College, Moodabidri.	2005	82.67%

Academic Project:

Mtech:

“Experimental study of near threshold fatigue crack growth rate in an Aluminum alloy 2024-T3 under the influence of periodic overload and underload” at Bangalore Integrated System Solutions Pvt Ltd (BiSS), Bangalore.

Aircraft structures are subject variable amplitude loading including tensile and compressive overloads, associated with turbulent weather and with maneuvers..Considering the sensitivity of fatigue crack growth to overloads and underloads and given the significance of near-threshold fatigue crack growth in the range 10^{-7} up to 10^{-5} mm/cycle, it is proposed to conduct crack growth tests under a variety of

periodic overloads and underloads in an attempt to characterize threshold stress intensity as a function of overload magnitude

BE:

Suggesting a road map for the implementation of “Total Productive Maintenance in the machine shop of MRPL (ONGC)”, Mangalore.

Total productive maintenance was taken as the project at the Machine Shop of MRPL with the objective to increase effectiveness of the equipment. TPM was carried out to raise their attitude, moral and skill level of the employees working in the machine shop. It is very effective management tool in the machine shop because it adds up to the productivity and the latest trend is to include activities of all departments right from the product development stage to simplify production, improve quality assurance and to reduce start up period.

Important responsibility held:

- Member of Institute of Engineers (Mechanical chapter)
- Member of Mechanical Engineers Association (MEA)
- Student pupil leader, Jain high school Moodabidri.

Extracurricular activities:

- Won 1st prize in miming competition held at Alva's College, Moodabidri
- Won 2nd prize in state level technical paper presentation competition at SRISHTI 09
- Won 2nd prize in skit conducted by Student's Council on Malnad Fest-2K9
- Participated in state level project exhibition & competition at SRISHTI 09

Hobbies:

- Listening to music.
- Playing table tennis.
- Cooking
- Reading novels
- Bike Riding

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Date: / /2023

Place: Bangalore.

(KIRAN KUMAR)