

## OBJECTIVE

Seeking an opportunity where I can  
Utilize my skills and contribute in  
The most effective manner in the  
Growth of the organization.

## PROFILE

- Engineering Design Professional with 9 year Experience in Computer Aided Engineering and Design, Value Engineering (VAE) and R&D mainly for Automotive, Manufacturing and Service Industry
- Possess significant knowledge and experience of Finite Element Analysis (FEA), Value Engineering and Value Analysis (VAE), Product Design and Validation, Project Management, NPD, APQP
- Project Tech Review with Customers OEMs to win new business, Design calculations and verification, RFQ Study for OEMs, Child part level Tech Reviews with suppliers for products such as Shift Tower, Shift Forks, Rails, Shafts and other transmission shifting components.
- Possess leadership skills and Experience of Team Management

# AVIJEET PSURYAVANSHI

Design Specialist-CAD/CAE/R&D/VAE/Project Management



## EXPERIENCE

### Deputy Manager • Best Koki Automotive P Ltd., Gurgaon (H.R) India • August 2018 TO Now

Best Koki Automotive Pvt. Ltd. is positioned No.1 as a Transmission Shifting Systems manufacturer and is a pioneer in introducing latest generation products that have altered the way Gear Shifting technology is perceived in the Indian market.

### Technical Manager • CADSoft Technologies, Gurgaon (H.R) India • JAN 2013 TO August 2018

CADSoft Technologies- a Consultancy division of CADCIM Technologies- is a subsidiary of CADCIM Technologies, Indiana, USA. The company provides Engineering Consultancy Services worldwide.

### SR. CAD Engineer • CADD CENTRE Training Services P Ltd. (U.P) India • JUNE 2011 TO JAN 2013

## EDUCATION

**B.E. in Mechanical Engineering** • Institute of Engineering & Technology IET Agra- (Undertaking Gov. of India) Agra University, Agra. India

**MBA in Operations and Supply Chain Management • Value Engineering**  
Pondicherry University, Pondicherry India  
Member of **Indian Value Engineering Society** (INVEST India)

**Certificate in Business Communication** from British Council India

## TECHNICAL SKILLS

Design Optimization, Material Optimization, Design validation, Finite Element Modelling, Static Analysis, Dynamic Analysis, Modal (Frequency) Analysis, Linear and non-linear Analysis, Thermal Analysis, Transient Analysis, Fatigue Analysis, Buckling Analysis, Product Design and development, RFQ Study, Technical Reviews, Value Engineering and Value Analysis (VA/VE), Cost Analysis, BOM Cost, Benchmarking of the products, Junkai Methodology, ECN, APQA, Project Management

CATIA V-5, ANSYS Workbench, ANSYS classic, HyperWorks, SOLIDWORKS Simulation, Autodesk Simulation Mechanical, Autodesk Inventor, Autodesk Fusion 360, AutoCAD, Pro-Engineer, MS-Office, Microsoft Project and PDM



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## PROJECTS and EXPERTISE

### **YRA Shift Tower design R&D and FEA test validation for customer- MSIL**

Investigate the stresses and deformation in the various parts of shift tower such as shift lever assembly, select lever assembly, housing and shaft.

### **Clutch Assembly Design and Validation: Value Engineering- Hero Moto Corp.**

Investigate the stresses in the P90 Clutch Assembly design at Running Condition of clutch with optimize Value Engineering design. Validate the VE (optimize) design for functioning of the Clutch Assembly.

### **Clutch Assembly Design and Validation: Value Engineering**

Investigate the stresses in the P90 Clutch Assembly design at Running Condition of clutch with optimize Value Engineering design. Validate the VE (optimize) design for functioning of the Clutch Assembly.

There are three parts for Value Engineering such as Centre Clutch, Pressure Plate and Lifter plate and four loads such as 2149 RPM, 32.67 Nm torque, 806.4 N Spring forces which need to analyse in FEA.

### **Non-linear material (FE 410) static analysis of ROPS assembly 105 HP tractor (Without Cabin):**

Non-linear material (FE 410) static analysis of protective structure of tractor. This analysis was simulating for three different load cases i.e. rear longitudinal load, side transverse load and crushing load. The protective structure is to be used in tractor. Total mass of the tractor  $M_t = 5115$  Kg

### **Sliding Gate FE Analysis: Design Validation**

This is project of Indian Gov. and installed at Nagpur airport. I have validated the design for the various loading conditions such as wind load, rolling and motor torque in three cases: Gate is open, close and half open. The design was fine with the mentioned load conditions in all cases.

### **20 Tons Excavator**

**Excavator** one of the heavy machinery equipment. We performed Stress Analysis with 3.5 to 4 Factor of Safety at three angles such as 0 degree, 55 degrees and 85 degrees. Material used as Steel AISI 1020

### **Spring Brake Actuator (SBA) FE Analysis: MINDA Nehtesco ltd, Gurgaon Haryana**

Spring Brake Actuator (SBA) FE analysis in 4 Conditions (Tests) with 2.5 mm thickness Cylinder.

The Static Structural Analysis has been carried out on Cylinder, Piston, and spring with three loads such as Pressure, and Spring Forces on Cylinder and Piston, respectively. Parking Test, Running Test Burst Test and Wind off Test

### **Analysis and Weight Reduction of a Tractor's Front Axle: Value Engineering**

The objective of this work was to analyze the current design of the tractor front axle and evaluate the proposed designs for reduction in weight and for better manufacturability. The current design was analyzed for 13 different Test loads

**SPECIALTIES:** Industrial Engineering, Application Engineering, Transmission Shifting System, Shift Towers, Clutch, Brakes, Value Analysis, Value Engineering (VAE), Benchmarking, Computer Aided Engineering, Research and Development, Product Design and Development, Team Management, Team Evaluation, Project management.