LALIT KIRAN PATIL

lalit.k.patil22@gmail.com
DOB: 22nd November 1988

Home: (0253)2236658
Cell: +91-9730438313

OBJECTIVE

A full-time permanent position in mechanical engineering with emphasis on design, product development, material science and CAE. Building mechanical professional with consistent academic record with zeal to learn new concepts quickly and apply innovative ideas for achieving best results. Actively seeking a role that will continually provide challenge, ideally within a dynamic and growing organization.

Work Experience:

Having work experience of 4.5+ years in the field of Mechanical Product design & development (MV Switchgear) (design/prototype building/testing/analysis/static-dynamic simulation) with the help of software's like Autodesk Inventor 17, Solid works 12, UG NX7, analysis software's like Ansys, inventor simulation.

Company: Eaton India Innovation Centre (December 2016-Present)

- Working as MV Engineer- NPI
- Working on design/development of GIS.
- Carry out all analysis required to prove proposed designs.
- Prototype building.
- Set-up and execute an extensive inspection, testing, validation of product designs.

Company: Lucy Electric India Pvt Ltd (August 2013-December 2016)

- Working as Design and Development Executive.
- Designed all phases of product development program utilizing internal personnel.
- Carry out all analysis required to prove proposed designs.
- Set-up an extensive inspection, testing, validation of product designs.
- Evaluate existing product design, company development goals and management techniques in order to formulate strategic plans to achieve project goals.
- Suggest re-design for existing products and give engineering support as required.
- Worked on sheet metal design of LV/MV panels, Marshalling boxes, PT panels.
- Working on Static analysis of structure members, Dynamic analysis of kinematic linkages, Analysis of force/torque transmitting components, dynamic simulation of mechanisms.
- Worked on Product concept development, Casting, molded, plastic, epoxy resin, sheet metal product design and manufacturing processes.
- Worked on 22 kV RMU (MCR) development, 22 kV LBS/CB, VCB interlocking, 36 kV circuit breaker design development.
- Good understanding of IEC Standards.

SKILLS:

- Technical skills: Mechanical product design & development, MV/HV Switchgear, Sheet metal, Dynamic analysis, Kinematic analysis, Load calculation, FEA, Fracture mechanics, Advanced materials, Composites and mechanics, Computational vibration techniques.
- Able to work independently or as an integral part of team and with a high degree of initiative.

  Self-motivated, a good problem solver allied to excellent communication and presentation skills.

ACADEMIC QUALIFICATION

Year	Qualification	Institute/University	%/CGPA
2013	M.Tech (CAD/CAM)Design	VIT University, Vellore	8.54/10
2011	B.E (Mechanical)	University of Pune	69.03%
2007	Class XII (M.S.B)	K.T.H.M College, Nashik	78.33%
2005	Class X (M.S.B)	Maratha High School, Nashik	78.80%

COMPUTER PROFICIENCY

- Proficient in Inventor 17, NX7, Solid works 12, Ansys12, Mat-lab 2009, ICEM-CFD.
- Basic knowledge of C programming.
- Proficient in the use of MS office, Outlook.

ACADEMIC PROJECTS

M.Tech Project: VIT University, Vellore.

"Elasticity Based Stress Analysis under Arbitrary Load using Fourier series"

- Presented a methodology to obtain the stress solution of a simply supported beam subjected to arbitrary load with the help of, elasticity based Fourier series approach.
- The applied load spectrum is converted into Fourier series with constant, sine and cosine components for which the solutions are derived.
- The individual solutions are superimposed to obtain the final result.
- The results are validated with FEA approach.

The paper is published in Applied Mechanics and Materials Vol. 367 (2013) pp 106-112© (2013) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.367,indexed in Scopus. It has been submitted as **"Elasticity Based Stress Analysis under Arbitrary Load using Fourier series"** and accepted in 3rd International Conference on Mechanics, Simulation and Control (ICMSC 2013).

(M.Tech Mini Projects)Presented research papers on:

"Study of Steady State Response and Design of Vibration Absorber for system of Vertical Drilling Machine" at 3rd International Science, Engineering and Technology Conference held at VIT University, Vellore, 13th-14th Nov 2011.

"Drilling of cooling holes on Plasma sprayed Yttria partially stabilized zirconia (YPSZ) on Incoloy 800H super alloy substrate used for thermal barrier coatings" at International Science, Engineering and Technology Conference held at VIT University, Vellore, 7th-8th May 2012.

BE Project:

"Study of air vents and analysis of diffused air vents in passenger car cabin with CFD simulation".
TATA AUTOCOMP SYSTEMS LIMITED (TACO) June 2009-May2010

- Worked as intern in Plastic and Interior Division (PID) on design of diffused air vents in passenger car cabin.
- Normally, cars have jet flow air vents. Tried to change the mechanism of fin positioning by giving different angles at one time and using small notches. Tried to diffuse the air flow, so as to get smoothing effect on body of passengers and increase passenger comfort experience.
- Used Catia for modeling tool; ICEM CFD for meshing and fluent as solver.

PERSONAL DETAILS

- **Nationality:** Indian **Blood group:** B+ve
- **Permanent Address:** 14, Bhushan Blw, Kalpataru Nagar, Ashoka Marg, , Nashik, Maharashtra, India- 422011.

INTERESTS

- Reading books, trekking, listening music. Playing cricket and football.