Parinit Angadi | **Machine Design Engineer**

Location: Bengaluru
Website: https://parinitangadi.github.io/Parinit
Email: parineetangadi@gmail.com
LinkedIn: parinitangadi581329
Phone: 9448853790

Professional Profile

Design and develop mechanical systems with multiscale modelling and simulations to analyse and realize material behaviour (Linear and Non-Linear) under various dynamic loadings (Cyclic, Non-cyclic and vibrations) and carryout non-destructive testing of material using novel techniques. Focused on developing novel techniques for governing material life using machine learning and artificial intelligence.

Technical Skills

Subjects

- Vibration Analysis
- Wave Mechanics
- Solid Mechanics
- Finite Element Method
- Molecular Dynamics
- Machine Learining & AI
- Data Science

Tools & Langauages

Design

- Catia V5

Analysis

- ABAQUS
- ANSYS
- COMSOL
- LAMMPS

Hardware and Data Acquisition

- NI DAQ
- LABVIEW
- Arduino

Languages

- MATLAB
- Fortran
- Python
- Visual Basics

Career Summary

Sept 2017 – Present **Indian Institute of Science, Bengaluru**
Project Associate

Outline
Part of Integrated Multiscale Engineering of Materials and Systems (iMEMS) at Department of Aerospace Engineering

Key Involvements
- Study of fatigue and fracture in aerospace materials by multiscale modelling and analysis (Molecular Dynamics and Finite Element Methods).
- Design and Development of Dynamic Vibration Testing Equipment. Extensive use of Modelling tool (CATIA V5), Data Acquisition tools and synchronization (NI DAQ, Arduino and LABVIEW), Hardware and sensor calibrations.
- Developed analytical methods to estimate viscoelastic material properties using Dynamic Vibration Testing Equipment.
- Developed code for ultrasonics non-destructive analysis of composites for composition and defect detection using image segmentation methods.
- Design of User Interface for major projects with LABVIEW State Flow.
- Handled HPC Cluster and Linux Systems.

Key Achievements
- Presented Work on 'Titanium Alloy Dislocations based on Molecular Dynamics' at ADMAT, Hyderabad.

Education

MTech.   Machine Design (2015-2017)
                                The National Institute of Engineering, Mysuru

Thesis: Crack Growth Propagation of Single Crystal Aluminium by Molecular Dynamics.
         The Thesis involved use of cohesive zone modelling (Mode I and Mode II) of crack growth and propagation in single crystal aluminium and generation of traction laws by Molecular Dynamics. The generated traction law was implemented in ABAQUS using user element (UEL) code in FORTRAN and its validation using patch test.

B.E.   Mechanical Engineering (2010-2014)
                                KLE M.S. Sheshgiri C.E.T., Belgaum

Thesis: Optimization of Milling Parameters to obtain better surface roughness using Taguchi Method

The Thesis involved optimization of milling parameters such as speed feed and DOC using design of experiments by Taguchi Method. The Taguchi method involves use of minimal experiments to obtain optimization of the parameters.

Additional Information

- Completed Online Courses on Machine Learning, Deep Learning and Data Science from Coursera.
- Interned at Aeronautical Development Agency (6 Months)
- Presented Work on 'Crack growth in Aluminium based on   Molecular Dynamics' at ICSNST, Mysuru.
- Organized a National Conference on Mechanical, Materials and Manufacturing Engineering at NIE, Mysuru.
- Adherent in Graphic Design, Animations and website creation.
- Languages known: English (Fluent), Kannada (Native), Hindi (Fluent), Telugu (Beginner), Marathi (Beginner)

Personal Information

Nationality: Indian
Address for Communication:
D/522 Fort Road, Haliyal,
Uttarkannada, Karnataka.
581329.