



Dipin K Nair

- 29 August 1993
- dipinknair619@gmail.com
- +91 8374090560
- 697, C Block, Aecs Layout
Brookfield, Bangalore - 560037
- linkedin/dipinknair

Education

B.E.(Hons.) Mechanical Engineering
IIT Hyderabad | 2016 | GPA:8.24/10

Class XII
AVSGHSS Karivellur | 2011 | 100 %

Class X
AVSGHSS Karivellu | 2009 | 10/10

Skills

Simulation : LDP, GSAM, Abaqus,
Simlab, Hypermesh, Ansys, Masta

Design : UG NX, Solid Edge, Solid
Works

Computational : Matlab, Excel

Programming : C, Excel VBA, Basics of
Python

Languages: English, Hindi, Malayalam

Strengths

Innovative
Improviser
Fast Learner
Mentor
Hardworking

Hobbies

Football
Trekking
Drawing
Video Games

Work Experience

2016 Sep - Senior FEA Analyst - General Motors | Bangalore

2.5 Years

Gears Analysis

- Gear modeling in GSAM software
- Micro geometry such as tip relief, lead taper etc are optimized
- Contact pattern and root bending stress are found
- LDP software used to find Peak to Peak transmission error
- Differential Ring gear modelled and analysed
- Drive/Coast & Max / Abuse cases are analysed
- Recommendations given to DRE to improve noise & contact pattern

Shaft Analysis

- Shaft analysis carried out to find stresses in fillets and holes
- Membrane generation for post processing

Differential Housing Analysis

- Analysis carried out to find stresses in windows and fillets
- Critical section analysis carried out find position of gear
- Contact convergence checked
- Pressfits are modelled at interface of bearings

Abaqus system modelling

- Substructure creation of component
- Node map generation
- Deflections are found on the retained nodes

VBA automation

- Automated planetary gears drawing template Excel
- Test data post processing tool
- GSAM post processing tool

Others

- DFSS Green Belt (Gear tip relief and dia of start of TR optimisation)
- DFSS Black Belt (In progress)

May-Aug'16 Student Intern - General Motors | Bangalore 3 Months

- Automation of Abaqus system modeling using VBA scripting
- Correlation of MASTA and Abaqus on simple shaft model for validating substructure method

May-Aug'15 Student Intern - Smartron India Pvt Ltd | Bangalore. 3 months

Industrial designing of smartphone

Publications

2018 Dynamic analysis of microbeams based on modified strain gradient theory using differential quadrature method
European Journal of Computational Mechanics

Achievements

- Secured 2763 in JEE 2011 out of 0.5 Million students appeared
- Secured State level 101 AIEEE out of 1.5 Million students appeared
- Secured 56th rank in KEAM 2011 out of 0.135 Million students appeared
- Represented IIT Hyderabad in ABU Robocon - 2014 held in Pune

Research and Projects

- Nonlocal Effect on the Frequency Analysis of Carbon Nanotubes
- Matlab code for the area filling algorithm for 3d printing
- Epoxy photo elasticity experiment to find stress concentration factor
- Stress and strain analysis of Ice Screw using FEA
- Making a model to explain sensing application and working of cantilever beam

