RAJU PEGADA

 Bangalore, India   Design Engineer   +91-8801087070

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PROFESSIONAL SUMMARY

Currently working as **Design Engineer** at **QuEST Global Engineering Services Pte Ltd.** with more than 1 years of experience in the field of Finite Element Analysis. A postgraduate in Manufacturing Technology from **NIT Tiruchirappalli**, looking for opportunities that widens my knowledge space & helps me contribute in the field by optimum application of my skills & experience.

TECHNICAL SKILLS

Finite Element Analysis	ANSYS	Microsoft Excel/Word
Strength of Materials	HYPERMESH	Model Analysis
Composites	NX	Structural Analysis
Flexible Manufacturing	CATIA	Fatigue Life

PROFESSIONAL EXPERIENCE

QuEST Global Engineering Services Pte Ltd.   **Bangalore, Karnataka**

Engineer   October 2019 – Present

- Created Finite Element Model models for the various engine components of Gas Turbine Engine which include disks, seals, blades and performed Structural, Model and Fatigue analysis.
- Hyper mesh, NX was used as the pre-processing tool and ANSYS was used as solver.
- Generate and publish loads and resulting tip closures from the different maneuver conditions to structural designers for critical engine components design and analysis.
- Aero Engine components are thoroughly analyzed from take off to landing for fatigue life cycles and detailed stress analysis reports are made for critical components having lesser life.
- Based on the Analysis performed tolerances were relaxed from time to time, which further improves the productivity of the manufacturing plant and reduces the inventory.
- Various hand calculations performed to analyze the air flow through air slots in aero engine components, to calculate moment of inertia for structural integrity.
- Develop and document the best practices, guidelines and lessons learnt for future references.
- I'm humbled to be awarded with "On the fly award" in the month of Feb, 2020.

Central Institute of Tool Design   **Hyderabad, Telangana**

Trainee   April 2013 – May 2013

- Learned industrial exposure as well as the exposure to advanced machining methods like NC and CNC machining.
- Studied about the machining problems faced while performing conventional machining like milling, shaping, grinding and lathe operations.

PROJECTS

Experimental investigation and characterization of laser welded NiTinol shape memory alloy.

- Study on Nd: YAG Laser welding of NiTinol sheets having 1 mm thickness. The quality of the weld is to be investigated by studying bead geometry (bead width, depth of penetration), microstructure and corrosion resistance.

Preparation and Characterization of kenaf cellulose based reinforced composites.

- Prepared a composite material by using Kenaf cellulose and Epoxy resin with the help of hand lay-up technique method. Noticed that the brittleness of epoxy resin can be reduced by adding kenaf cellulose material to it. Tested the mechanical properties of the composite material.

EDUCATIONAL BACKGROUND

NIT TIRUCHIRAPPALLI   August 2016 – June 2018

M. TECH, Manufacturing Technology. 8.82 CGPA
Publication: A comparison of the effect of different heat treatment processes on laser-welded NiTinol sheets.
Published Journal: Mechanical Sciences and Engineering.
Responsibilities: Placement Volunteer at NIT Tiruchirappalli.

KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE   August 2011 – June 2015

B. TECH, Mechanical Engineering. 80.12 Percentage
Responsibilities: Conducted workshops on Composite Materials.
                        Event Manager at Tech Fest held in KITS, Warangal.

LEADERSHIP AND ACTIVITIES

HumaNITTy   Telangana, India
Volunteer   September 2018 – Present

- HumaNITTy is a Daan Utsav initiative of National Institute of Technology, Tiruchirappalli.
- 20 teams work with one another on providing skills to the unprivileged children.
- HumaNITTy helps as scribe to blind people during examinations.

LANGUAGE SKILLS

- Telugu   – Native
- English – Fluent
- Hindi   – Conversational