

SAI SANTHOSH RAO KOTHA

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EDUCATION

Bachelor of Technology (MECHANICAL)

Gokaraju Rangaraju Institute of Engineering and Technology

08/2018 - 07/2022

8.59(CGPA)

PERSONAL PROJECTS

EXPERIMENTAL AND CFD ANALYSIS OF GROOVED WICK HEAT PIPE (10/2021 - 05/2022)

- Modeled and Performed CFD analysis in ANSYS on Grooved wick Heatpipe to analyze the flow of fluid inside the heat pipe and temperature variation along the length of the heat pipe. Performed experimentation on grooved wick heat pipe and calculated heat transfer coefficient, thermal resistance, and thermal efficiency. Validated experimental results with numerical results.

DESIGN AND ANALYSIS OF VERTICAL AXIS WIND TURBINE ROTORS (04/2021 - 07/2021)

- The main objective of turbine aerodynamics is to enhance the aerodynamic characteristics and performance of turbine. Designed a small-scale vertical axis wind turbine using NACA 0018 Aerofoil in ANSYS. Performed Computational Fluid Dynamics (CFD) on the turbine at different velocities, visualized the flow of air, and determined its efficiency.

ALL TERRAIN VEHICLE (ATV)- SAE BAJA INDIA (03/2019 - 04/2020)

- Designed and fabricated a complete ATV Vehicle which is suitable for All Terrain and tough tracks with specified regulations provided by BAJA SAE INDIA. Designed, analyzed and optimized components like Roll cages, Mounting Brackets.

WORK EXPERIENCE & INTERNSHIPS

Associate Mechanical Engineer

L&T Technology Services

09/2022 - Present

BANGALORE, INDIA

Achievements/Tasks

- Generating New Engineering/Product change orders or requests. Creating or updating BOMs, Part numbers, and specification documents in PLM sites. Managing product changes across various components and coordinating validation and execution
- Undertook Technical courses such as GD&T, Tolerance Stack-up analysis, Sheet metal design, Mold design, Mechanisms & Linkages as well as various Professional courses as part of the Step-in program by LTTs. Underwent tools training on SolidWorks, Creo, and Siemens NX under the Genesis program in LTTs

Research Intern

Automotive Research Association of India (ARAI)

04/2022 - 08/2022

PUNE, INDIA

Task

- Worked on the design, development, and testing of Thermal Management Systems (TMS) for 2-wheeler electric vehicle batteries. Modeled and performed thermal simulation on battery packs for 2-W electric vehicles.
- Involved in Lithium-ion battery (NMC) testing, cell modeling, thermal simulation, and Validation using COMSOL Multiphysics in 3-D.

Project Trainee

Defence Electronics Research Laboratory (DLRL)

10/2021 - 12/2021

HYDERABAD, INDIA

Description

- Designed and analyzed "Spiral Helix Antenna Radome for Aircrafts".
- Performed CFD analysis in ANSYS to obtain pressure load acting on the radome structure. Performed FSI in ANSYS to obtain stresses and deformation of the radome structure.

SKILLS

SOLIDWORKS

CREO

ANSYS

SIEMENS NX

GD&T

PYTHON

CAE & FE MODELLING

MS OFFICE

COMSOL MULTIPHYSICS

PROBLEM SOLVING

CRITICAL THINKING

CAD MODELING

PROJECT MANAGEMENT

ACHIEVEMENTS AND CO-CURRICULAR ACTIVITIES

AUTOMATION IN MANUFACTURING -NPTEL (09/2020 - 12/2020)

Finished in Top 2% and got Gold Medal in NPTEL exam Conducted by IIT GUWAHATI

PROCESSING OF POLYMERS AND POLYMER COMPOSITES-NPTEL (01/2021 - 03/2021)

Awarded Gold Medal in this NPTEL exam CONDUCTED by IIT ROORKEE

AAKRUTHI Design Competition-Dassault Systems (2020 and 2021)

Participated in Design Contest

CERTIFICATES

SAE BAJA INDIA 2020 and FRATERNITY OF MECHANICAL AND AUTOMATIVE ENGINEERS

RUNNER UP IN FMAE BAJA 2020

CERTIFIED SOLIDWORKS PROFESSIONAL (CSWP) (12/2019 - Present)

CERTIFICATE FOR ADDITIVE MANUFACTURING BY DASSAULT SYSTEMS (09/2020 - Present)

CERTIFICATE OF TRAINING IN ANSYS BY ELEATION ACADEMY (11/2021 - Present)

LANGUAGES

ENGLISH

Full Professional Proficiency

HINDI

Professional Working Proficiency

TELUGU

Native or Bilingual Proficiency

INTERESTS

TRAVELLING

SHUTTLE BADMINTON

CRICKET

READING BOOKS