



BRIEF SUMMARY

My career objective is to leverage my expertise in technical skills and hands-on experience in CAD design and project management. Seeking opportunities to apply knowledge in a dynamic engineering environment. My goal is to not only excel in my role but also to contribute to the growth and success of the organization by staying at the forefront

KEY EXPERTISE

Catia - intermediate to advanced

Excel - intermediate to advanced

PTC CREO - intermediate to advanced

MATLAB - beginner

Ansys - beginner

EDUCATION

MIT Academy of Engineering, Pune

2021 - 2025

B.Tech. - Mechanical Engineering | CGPA: 9.60 / 10

Govertment Polytechnic Gondia, Gondia

2022

Diploma | Diploma - Mechanical Engineering | MSBTE | Percentage: 80.46 / 100

Little Flower English High School, Gondia, Gondia

2019

10th | maharahtra state board of secondary and higher secondary education | Percentage: 82.80 / 100

AWARDS AND SCHOLARSHIPS

- Academic Excellence (ME - SY)
- Academic Excellence (ME - TY)

INTERNSHIPS

Eaton India innovation center | Power / Energy

03 Jun, 2024 - 02 Sep, 2024

Cost Estimation Engineer

Key Skills: PTC creo cost estimates Excel VAVE

Direct material productivity, Evaluated and controlled project expenses, Created and managed budgets, Monitored and reduced costs, Negotiated with vendors for better prices, process optimization.

PROJECTS

Automatic Cell Sorting Machine using Internal Resistance Testing

02 Sep, 2023 - 30 May, 2025

Mentor: Mr. B.R. Patil | **Team Size:** 4

Key Skills: internal resistance testing catia arduino, c++ machine learning

"Designed and developed an automated cell sorting system utilizing internal resistance testing, leveraging microfluidics, electrochemical sensing, and machine learning algorithms. Implemented real-time impedance spectroscopy for cell classification, achieving accurate differentiation and sorting of cell types based on their electrical properties.

Compact heat exchanger

01 Jan, 2024 - 19 May, 2024

Mentor: Dr. Pramod kothmire | **Team Size:** 5

Key Skills: CAD Modeling compactness

To efficiently transfer heat between two fluids while occupying minimal space. To maximize the surface area available for heat transfer within a limited volume, often using intricate designs such as fins, corrugations, or micro channels.

Fabrication and kinematic analysis of 3DOF Robotic arm

05 Nov, 2022 - 05 Jul, 2023

Mentor: Mr. B. R. Patil | **Team Size:** 4

Key Skills: kinematics analysis 3D modeling CATIA C++

"Designed, fabricated, and analyzed a 3-DOF robotic arm, utilizing kinematic modeling and simulations to optimize joint torques and end-effector positioning. Implemented forward kinematics algorithms to achieve precise motion planning and control. Fabrication involved , 3D printing, and assembly of structural components.

PUBLICATIONS / RESEARCH / WHITE PAPERS

"Efficiency of Various Stack Structure in Thermo-acoustic Refrigeration System"

18 Dec, 2024

Thermal and Design Engineering | **Mentor:** Mr. S.B. Powar | **No. of Authors:** 4

Key Skills: Thermal analysis thermo-acoustic system stack audacity software

A thermo-acoustic refrigeration system is a cooling technology that uses sound waves to create a temperature difference.

Convert electrical energy into thermal energy.

Sound waves cause compression (heating) and expansion (cooling) of gas.

Temperature gradient can be generated by putting a stack of plates.

Real-Time Ambulance Detection using Audio Recognize Sensor

Conference Paper | Sandip Institute of Technology and Reserch Center | **Mentor:** MR. A. Chandore | **No. of Authors:** 3

Key Skills: Emergency response vehicle safety audio recognized system embedded system

We deployed an audio recognition technology to be used in vehicles and to manage traffic.

It is based on the ability to recognize particular frequency patterns of ambulance sirens and utilizes specialized microphones, Digital Signal Processing (DSP), and machine learning methods.

If it does, the new system recognizes that behavior and will notify a driver to pull over or, for an autonomous vehicle, take an automated action such as changing lanes or velocity.

SEMINARS / TRAININGS / WORKSHOPS

Automation in Manufacturing Institute Name: NPTEL

09 Jul, 2024 - 09 Oct, 2024

Key Skills: Manufacturing Process Material Designing

Solid Works

07 Apr, 2024 - 07 May, 2024

Institute Name: Udemey

Key Skills: designing Surface finishing modeling

SolidWorks is a 3D CAD software.

SolidWorks allows users to create complex 3D models.

SolidWorks enables users to create assemblies of multiple parts.

SolidWorks offers simulation and analysis tools for design validation.

The Complete Hydraulic Course

30 Sep, 2023 - 09 Oct, 2023

Institute Name: Udemey

Key Skills: Understand Fluid Power Various Component of Hydraulic Function of circuit

Evaluate different industrial application of hydraulic system,

Troubleshooting of Hydraulic system

30 Day's Masterclass on EV vehicles degin

26 Jun, 2023 - 28 Jul, 2023

Institute Name: Pantech e Learning

Key Skills: designing basic of vehicle

learn about different parts of vehicles

MATLAB Onramp

03 Nov, 2022 - 03 Dec, 2022

Institute Name: MathWorks Tranning Services

Key Skills: matrices logical arrays plotting data programming

CO-CURRICULAR ACTIVITIES

- o Actively attend Super 30 Classes
- o Robotics Workshop
- o Football (2nd rank) at nakshtra
- o Shot-Put (3rd rank) at nakshtra

EXTRA CURRICULAR ACTIVITIES

- Organize MESA Sport Festa
- Event Management
- Blood Donation Camp
- Cleaning Drive at Rajgad Fort

IMs

- Other - https://www.linkedin.com/in/mukesh-gautam-353a52273?utm_source=share&utm_campaign=share_via&utm_content=profile&utm_medium=android_app
- WhatsApp - 8080504253

PERSONAL DETAILS

Gender: Male

Marital Status: Single

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