

# GAURAV SUNIL MALI

**B.Tech.** - Mechanical Engineering

Ph: +91-8888785509

Email: gaurav.mali@mitaoe.ac.in Pune, Maharashtra, India - 412105

LinkedIn: https://www.linkedin.com/in/gaurav-mali-391828279d



## **BRIEF SUMMARY**

•I am a final year Mechanical Engineering student at MIT Academy of Engineering, Pune, maintaining a CGPA of 8.92. Proficient in AutoCAD, CATIA, and ANSYS, I contribute effectively to engineering projects. •During an internship at Parivartan Innovation Pvt Ltd, I specialized in converting petrol vehicles to electric, showcasing adaptability and innovative thinking. •Currently, at Meson Valves India Ltd, I play a pivotal role in the project and planning department for Special Meson Group, ensuring meticulous planning and adherence to quality standards in manufacturing crucial valves for "Indian Navy Warships". My skills set making me a passionate mechanical engineer poised for challenging roles.

### **KEY EXPERTISE**

ASME Standard Mechanical Design Project Management Mechanical Ansys AutoCad Engineering Calculations Strength of Material Technical Problem-Solving Quality Control & Assurance Valves Inventory Technical Proficiency

### **EDUCATION**

MIT Academy of Engineering, Pune

2020 - 2024

B.Tech. - Mechanical Engineering | CGPA: 8.92 / 10

Government Polytechnic, Jalgoan, Jalgoan

2021

Diploma | Diploma - Mechanical Engineering - Mechanical Engineering | MSBTE | Percentage: 92.77 / 100

Sarvajanik Vidyalaya, Asoda, Jalgaon, Jalgoan

10<sup>th</sup> | MSBSHSE | Percentage: 80.20 / 100

2018

# **INTERNSHIPS**

Meson Valves India Ltd. | Core Engineering Intern in "Project And Planning Department"

19 Feb, 2024 - Present

Key Skills: Project Management Strategic Planning Technical Documentations Valves Manufacturing

As an intern Special Meson Group at Meson Valves India Ltd, I am actively engaged in the project and planning department of the company. Meson Valves specializes in the manufacturing of a diverse range of valves like Ball, Butterfly, Gate, Globe, Check Valves & Strainers crucial for "Indian Navy warships".

Parivartan Innovations Pvt. Ltd. | Core Electrical Engineering / Manufacturing Internship

01 Jun, 2023 - 31 Jul, 2023

**Kev Skills:** 

Electric Vehicle Conversion Battery Technology Motor Controller Environmental Impact Charging Infrastructure

During my Summer Internship at Parivartan Innovation Private Limited, I gained valuable insights into the conversion of petrol vehicles to electric vehicles. I acquired hands-on experience in the transformative process, contributing to my understanding of sustainable transportation solutions.

### **PROJECTS**

Kev Skills:

Multi-Purpose Agriculture Grass-Cutting Machine

01 Aug, 2022 - 21 Dec, 2023

Mentor: Dr. Prashant Jikar | Team Size: 4

Manufacturing Processes Multifunctional Design Agriculture Automation Precision Farming

Project Integration

Project Link: https://drive.google.com/drive/folders/1ZBpL0D6LcDc FtXA9US-cqykm5ro i5r

In this project, we tried to do three operations at a time like grass cutting, solid fertilizer spreading, and spraying pesticides or fertilizer this application is a comprehensive approach to promoting healthy and productive plant growth. This project is designed to improve the overall health and yield of the plants by providing essential nutrients and proper maintenance through grass cutting. My group is collaborating on patenting our innovative approach in sustainable farming practices.

**Tubing In Wall To Achieve Evaporative Air Conditioning** 

01 Jan, 2023 - 14 Apr, 2023

Mentor: Dr. Pramod kothmire | Team Size: 3

Key Skills: CFD Analysis | Heat Transfer

Project Link: https://drive.google.com/drive/folders/1Mfe\_rV-i8-74Sl2H2BM\_KunT9bHDBDnQ

This tubing in-wall evaporative air conditioning project involves the installation of a tubing system within the walls of a building to achieve effective and energy-efficient cooling using evaporative air conditioning. The system utilizes water evaporation to cool the incoming air, providing a natural and eco-friendly way to maintain a comfortable indoor environment.

**Battery Cell Testing Module** 

04 Apr, 2022 - 20 Jun, 2022

Mentor: Prof. B.R. Patil | Team Size: 4

**Key Skills:** Testing Monitoring Fault Detection

As the demand for electric vehicles increases simultaneously so In this module, we assess 25 electric vehicle cells simultaneously to distinguish between defective and functional ones, catering to the rising demand for electric vehicle batteries.

**Pendulum Operated Water Pump** 

01 Aug, 2020 - 11 Mar, 2021

Mentor: Prof. K.G. Patil | Team Size: 4

Key Skills: Innovation Design Cost-effective solutions Kinematics Pendulum Dynamics Manufacturing Operations

Project Link: https://drive.google.com/file/d/1y9-rSdK6YJ12Tm-CZjOXNyBm4WqJAZbc/view?usp=drivesdk

In my final year diploma project, I devised a pendulum-operated water pumping system inspired by Newton's third law. It efficiently utilizes pendulum motion to drive reciprocating action, offering a cost-effective, energy-efficient solution devoid of electricity. This innovation caters to remote areas, presenting a sustainable alternative for water pumping.

#### **ACHIEVEMENTS**

- 2nd Rank Achiever In Board Exam.
- o In 10th Standard 1st Rank Achiever in Technical Domain in Elements of EL. and EC. Technolog Subject.

### ASSESSMENTS / CERTIFICATIONS

National Programme On Technology Enhanced Learning [NPTEL]

Aggregate: 67 / 100

I successfully Completed the NPTEL course in Automation in Manufacturing Subject.

Catia V5 Beginner to Advanced - Automatic and Industrial

The Complete Hydraulic Course

# **SEMINARS / TRAININGS / WORKSHOPS**

"Battery Management System For Electric Vehicles"

09 Oct, 2023 - 14 Oct, 2023

Institute Name: STES's Sinhgad College of Engineering, Pune, Maharashtra.

Key Skills: Automotive Energy Efficiency Electricel system Lithium Ion Cell Voltage

The purpose of a Battery Management System (BMS) is to monitor, manage, and protect the cells within a battery pack, ensuring optimal performance, longevity, and safety.

## **PERSONAL INTERESTS / HOBBIES**

I like to playing and watching the cricket, listening to kirtan, & like to read factual stories and also like to listening.

## **PERSONAL DETAILS**

Gender: Male
Marital Status: Single

Current Address: Kate vasti, Alandi Taluka Khed And District

Pune., Pune, Maharashtra, India - 412105

Date of Birth: 26 Jul, 2002

Known Languages: Marathi, Hindi, English.

**Permanent Address:** At post Asoda, Dhandhore Nagar, Tarsod Road. Tal. And Dist. Jalgoan, Jalgaon, Maharashtra, India -

425001

**Phone Numbers:** +91-8888785509, +91-8459750080

Emails: gaurav.mali@mitaoe.ac.in, maligaurav307@gmail.com

## REFERENCES

o Dr. S.B. Patil

(Assistant Professor, MIT Academy Of Engineering Alandi, Pune) (+91-7204777997, sb.patil@mitaoe.ac.in)