



## PROFESSIONAL SUMMARY

Mechanical Engineering student with a strong foundation in simulation, optimization, and CAD/CAE tools. Eager to contribute to research-oriented projects through analytical and hands-on problem-solving skills in a collaborative academic environment.

## KEY EXPERTISE

CATIA AutoCAD ANSYS

## EDUCATION

## MIT Academy of Engineering, Pune

2022 - 2026

B.Tech. - Mechanical Engineering | CGPA: 7.89 / 10

## Government Polytechnic Awasari Kh, Pune

2023

Diploma | Diploma - Diploma In Automobile Engineering | MSBTE | Percentage: 69.06 / 100

## KTES English Medium School

2020

10<sup>th</sup> | SSC | Percentage: 78.40 / 100

## INTERNSHIPS

## EduSkills Foundation | Academics / Research

07 Jul, 2024 - 07 Aug, 2024

ANSYS Fluid Dynamics Virtual Internship

**Key Skills:** Simulation Meshing Modeling Analysis Visualization Optimization Validation Troubleshooting Interpretation

We have learnt skilled in creating and refining geometry and mesh for accurate simulation results using tools like ANSYS Meshing and Space Claim. Capable of analyzing simulation data, generating reports, and optimizing designs for performance improvement.

## Government Polytechnic Awasari | Automotive / Ancillaries / Automobile

17 Jul, 22 - 15 Aug, 2022

TRINITY AUTO INDUSTRIES

**Key Skills:**

Hands-on experience in manufacturing, quality control, and component inspection at Trinity Auto Industries. (126 characters)

Worked closely with engineers and supervisors, preparing daily reports and assisting in process improvements. Gained hands-on experience with machining, assembly, and quality control in automotive component production.

## PROJECTS

## ANSYS Based Analysis Of Fluid Flow Through Venturimeter

01 Mar, 2025 - 01 May, 2025

Mentor: Dr. Shreekant Patil | Team Size: 2

**Key Skills:**

CAD Modeling – Meshing Techniques Fluid Mechanics Knowledge Problem Solving &amp; Debugging

Validation &amp; Comparison

Simulated fluid flow through a venturimeter using ANSYS Fluent to study velocity and pressure changes. Analyzed flow characteristics and pressure drop to evaluate measurement accuracy. Optimized venturimeter design based on CFD results for improved flow measurement efficiency.

## Production Of Biodiesel From Karanja seeds

20 Sep, 2024 - 20 Apr, 2025

Mentor: Dr. Subrata Bhowmik Sir | Team Size: 4

**Key Skills:** Seed Collection & Processing Oil Extraction Transesterification Process Quality Testing Optimization

Biodiesel can be produced from Karanja seeds by extracting the oil and converting it into biodiesel through a transesterification process. This eco-friendly fuel is a sustainable alternative to conventional diesel.

## Thermal Analysis Of Cylinder Head Gasket In ANSYS

01 Oct, 2024 - 01 Dec, 2024

Mentor: Dr. Subrata Bhowmik Sir | Team Size: 2

**Key Skills:** ANSYS CATIA Heat Transfer Analysis Team Leadership Project Coordination

Performed steady-state thermal analysis to evaluate temperature distribution and heat transfer across the gasket. Interpreted results to identify hotspots and improve material selection and thermal performance.

## ASSESSMENTS / CERTIFICATIONS

### AutoCad

09 Sep, 2024

**Provider:** Elewayte

**Key Skills:**

CAD Modeling 2D Drafting Dimensioning & Annotations Editing Tools Geometric Dimensioning and Tolerancing (GD&T)

AutoCAD is CAD software by Autodesk used for precise 2D and 3D engineering designs. It supports layers and annotations for detailed documentation. These software enables engineers to design components, assemblies, and structures with precision.

### ANSYS Fluid Dynamics

09 Sep, 2024

**Provider:** MIT Academy Of Engineering Alandi

**Key Skills:** CFD Modeling Meshing Solver Setup Heat Transfer Analysis Problem-Solving Optimization

After ANSYS Fluid Dynamics certification, we learn skills in CFD simulation, fluid flow and heat transfer analysis, meshing, and boundary condition setup.

### Claude 101

**Provider:** MIT Academy Of Engineering Alandi

### AI Fluency: Framework & Foundations

**Provider:** MIT Academy Of Engineering Alandi

### AI Fluency for Students

**Provider:** MIT Academy Of Engineering Alandi

## SEMINARS / TRAININGS / WORKSHOPS

**Fluid Dynamics Virtual Internship Institute Name:** MIT Academy Of Engineering Alandi

07 Jul, 2024 - 07 Aug, 2024

**Key Skills:** Key skills for a fluid dynamics virtual internship: CFD analysis, ANSYS/Fluent, flow visualization, problem-solving,.

We have learnt skilled in creating and refining geometry and mesh for accurate simulation results using tools like ANSYS Meshing and Space Claim. Capable of analyzing simulation data, generating reports, and optimizing designs for performance improvement.

## PERSONAL INTERESTS / HOBBIES

- o Drawing, Cooking, Writing.

## PERSONAL DETAILS

**Gender:** Female

**Marital Status:** Single

**Current Address:** Samrudhi Niwas, Shirol, Ektanagar- 410505, Samrudhi Niwas, Shirol, Ektanagar- 410505, Khed, Maharashtra, India - 410505

**Emails:** samruddhikamthe9@gmail.com , 202302090046@mitaoe.ac.in

**Date of Birth:** 14 Mar, 2004

**Known Languages:** Marathi, Hindi, English

**Phone Numbers:** +91-8767606636, +91-8767606636