



## Saurabh Desai

DOB.: 19/02/2003

Pre Final Year Btech

Mechanical Engineering

Veermata Jijabai Technological Institute, Mumbai

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🐙 GitHub

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## EDUCATION

### •Veermata Jijabai Technological Institute (VJTI)

2021-25

Btech Mechanical

CGPA:- 7.43 : 2023

### •Balasaheb Desai College Patan

2019-21

HSC, Maharashtra

Percentage:- 96 : 2021

## RELEVANT COURSES

- Robotics      Machine Design      Automotive      Fluid Mechanics      Thermodynamics
- Industry 4.0 and IIOT      Industrial Engineering And Management      Innovation and Entrepreneurship

## PROJECTS

### –Smart Irrigation System

Ongoing

Contributed to sustainable agriculture practices by improving water efficiency and crop yields.

- \* Implemented AI-driven smart irrigation system, analyzing sensor data to optimize water distribution and enhance crop growth.
- \* Leveraged ML algorithms to predict soil moisture levels and automate irrigation scheduling, reducing water wastage.

### –Mars Rover Prototype

Aug-2023

Participated in IRC Mars Rover Prototype Competition as a key member of the Mechanical Subsystem team.

- \* Utilized 3D printing, robotics, PCB design, smart manufacturing, sensors, cameras, and communication models in the development of a multifunctional rover.
- \* Crafted a Mars rover prototype for analog environment trials, showcasing proficiency in robotics, 3D printing, PCB design, and sensor integration.

### –3-Degree of Freedom Robotic Arm

June-2022

Designed a 3-DOF robotic arm with expertise in kinematics and C programming for precise rotational control.

- \* Utilized tools like Gazebo and RVIZ, applying modeling and simulation for kinematic analysis.
- \* Attained precise control of the robotic arm's motion, ensuring enhanced capabilities in applications like automation and manipulation tasks.

### –Remote Control Aircraft

Jan.-2022

Contributed to lightweight, balsa wood RC aircraft development with a focus on design and aerodynamics.

- \* Employed tools and technologies relevant to aircraft design, including modeling software and remote control systems.
- \* Achieved a successful outcome with a functional remote control aircraft, emphasizing durability and performance for recreational and educational purposes.

## TECHNICAL SKILLS

- Software's: SolidWorks, Ansys, AutoCad, Fusion 360, Ultimaker Cura
- Programming Languages: C++, ROS, G and M code,
- Platforms: VS Code, Git, GitHub

## ACHIEVEMENTS

- Joint Entrance Examination (JEE Advanced) AIR 22089 2021
- Joint Entrance Examination (JEE Mains) AIR 48640 2021
- Maharashtra Common Entrance Test (MHT-CET) Percentile:- 97.78 2021

## POSITIONS OF RESPONSIBILITY

- Member of Mechanical Subsystem Vishwa, VJTI (Astronomy club of the institute.) Nov. 2022 - Present
- Member of Power Transmission sector VJTI Racing March 2022 to June 2023
- Operations Executive Technovanza, VJTI Aug. 2022 to June 2023
- Chief Content Manager Entrepreneurship Cell, VJTI Aug. 2022 to June 2023