



Saurabh Desai

DOB.: 19/02/2003

Pre Final Year Btech

Mechanical Engineering

Veermata Jijabai Technological Institute, Mumbai

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EDUCATION

•Veermata Jijabai Technological Institute (VJTI)

2021-25

Btech Mechanical

CGPA:- 7.36 : 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 | | |

EXPERIENCE

– Vishwa, VJTI (Astronomy club of the institute.)

Rover Suspension subsystem Lead

Mumbai

- * Led the Rover Suspension Subsystem, gaining expertise in 3D modeling with SolidWorks and component analysis using Fusion 360 and Ansys
- * Gained hands-on experience in various manufacturing processes (CNC machining, 3D printing, laser cutting) and equipment operation during rover model construction.

PROJECTS

Weed Control Farming Robot

Feb. 2024

Designed a 3D model of a weed control robot using SolidWorks.

- Engineered a robust four-wheel-drive system integrated with a chain drive mechanism for optimal mobility.
- Designed a weed control mechanism featuring cutting blades and motors with linear actuators for precise height control

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
- 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** Enterpreunership Cell, VJTI Aug. 2022 to June 2023