

# SHUBHAM MEHTA

## Mechanical Engineer

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## SUMMARY

Mechanical engineer with a passion for tech and a knack for leading both machines and teams. With 2+ years of experience, I've built robots, led teams, and even convinced a drone to beat the wind. I'm all about blending creativity with technology, believing the best ideas come from collaboration. Looking ahead, I aim to push the boundaries of innovation, lead impactful projects, and maybe inspire the next generation of tech enthusiasts along the way.

## EXPERIENCE

### Technical operations lead

**Encora Air Pvt. Ltd** 📅 03/2024 - 08/2024 📍 Mumbai, India

Technical operations lead.

- **Lead** daily operations of the **technical department**.
- **Planned** and **coordinated** technical processes with **cross-functional teams**.
- **Ensured** compliance with **industry** regulations and **safety standards**.
- Managed **troubleshooting** and **provided** hands-on **technical support**.
- **Analyzed performance data** for operational efficiency and continuous improvement.

### Robotics Designer

**Photom Technologies Pvt. Ltd** 📅 01/2023 - 03/2024 📍 Ahmedabad, India

Robotics Designer.

- **Designed** solar panel cleaning robots (**Autonomous and Manual**).
- **Customized** designs as per the client's requirements.
- **Collaborated** with the Electronics and Manufacturing **team, guiding** them through the entire process.

### Drone Pilot and Aviation Research Intern

**Flyo Eduventures Pvt. Ltd** 📅 09/2022 - 01/2023

Drone Pilot and Aviation Research Intern.

- Designed and fabricated a **medical drone**.
- **Tested** various drone frames.
- Conducted **researches** based on an aerial survey.

### Robotics Instructor and Human resources assistant

**Brainlox** 📅 07/2022 - 08/2022

Robotics Instructor and Human resources assistant.

- **Coached robotics** to students aged 12-22 years.
- **Managed** and scheduled lectures as part of the **HR team**.
- Conducted doubt sessions regarding **robotics and technology**.
- Conducted **onboarding** sessions for newly joined interns.

### Digital Marketing Intern

**Viral Fission** 📅 04/2019 - 05/2020

Digital Marketing Intern.

- Conducted **market-based research** for brands like **JioSaavn, OnePlus, Myntra, Vice and Times Network**.
- Learned graphic designing softwares, **Adobe Photoshop** and **Adobe Illustrator**.
- Managed the **database** of these brands and represented it in the form of Gantt charts and graphs using **Tableau** and **Power Bi**.

## EDUCATION

### MBA in Technology Management

**Tuhh's Northern Institute of Technology Management**





📅 2024 - Present 📍 Hamburg, Germany

### Bachelor Of Technology in Mechanical Engineering

**Dwarkadas J. Sanghvi College of engineering**

📅 2019 - 2023 📍 Mumbai, India

## KEY ACHIEVEMENTS

-  **Winner of European Rover Challenge**  
Won **1st place** internationally at the European Rover Challenge after winning four of five tasks.
-  **Second position at DJS Nirmiti's Project competition**  
Ranked **second position** at DJS Nirmiti's Project competition for designing a biomimetic inspired VTOL UAV.
-  **Grand Finalist at CopterHack'22**  
Secured **1st rank** in Asia and **7th rank** worldwide in CopterHack'22.
-  **Winner of Electronics' eQuiz competition Awarding Institution**  
Won this quiz with **96%**, edging out **40 competitors** from the state.

## PROJECTS

### Structural Analysis of a Drone Frame

📅 07/2022 - 09/2022

Structural analysis of a drone frame to determine the best material.

- **Analyzed** a drone frame for optimum material selection using **Ansys 2020**.
- **Material selection** was based on material properties like Tensile Strength, Modulus of Rigidity, Stiffness, and its behavior to loads like **Deformation and Stress values**.

### Design and Fabrication of bird inspired VTOL UAV

📅 2022 - 2023

The project entails creating **an aircraft that mimics bird flight mechanics**.

- The design process involves studying the biomimetic model's **aerodynamics**, analyzing its flight characteristics, and creating a **3D CAD model**.
- The goal of a biomimetic VTOL UAV is to **improve flight agility, maneuverability, and efficiency** for aerial surveying and search and rescue operations.

### Air ambulance

📅 04/2020 - 06/2020

Development of a medical drone for rapid victim aid.

- Introduced a drone **medical application** for swift delivery of aid.
- **Autonomous** operation eliminates the need for pilots.
- Equipped with a monitor for **direct communication** with doctors.

### Vertical Wind turbine

📅 03/2019 - 04/2019

Vertical wind turbine project.

- Designed a portable vertical wind turbine that can produce power in any weather because of its **mobility**.
- **Lightweight** design for diverse usage scenarios.

PASSIONS



Founder and Captain of DJS Astra

I formed and led a team of 25 to compete in **combat robotics**, gaining hand-on experirnce in the field. We built three robots in different weight categories: 8kg, 15kg, 30kg.



Captain of DJS Phoenix

I mentored a team of 15 in designing and competing with **autonomous and racing drones**, successfully building four drones and winning prestigious competitions like COEX, IDRL, and iMAV.

CERTIFICATION

G-Suite Administration Specialization

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MATLAB: On Ramp

Certificate in MATLAB: Onramp

Virtual Reality

University of London - Coursera

LANGUAGES

Gujarati	Native	●●●●●
English	Native	●●●●●
Hindi	Proficient	●●●●●
German	Beginner	●●●●●

SKILLS

SolidWorks	Adobe Photoshop	Ansys	
Robotics	G-Suite	Office-365	Matlab
Teamwork	Leadership	Inquisitiveness	
Time management	Effective communication		