

Shubham Mehta

Date of birth: 17/05/2001 | **Nationality:** Indian | **Phone number:** (+91) 8291039424 (Mobile) | **Email address:** i.mehta.shubham@gmail.com | **LinkedIn:** <https://linkedin.com/in/shubham-mehta1> |

Address: C-1, 302, Neel Kamal, Sec 6, Shanti Nagar, Mira road (east), 401107, Mira road, India (Home)

● ABOUT ME

I am a motivated and dedicated Mechanical Engineering student at Dwarkadas J. Sanghvi College of Engineering in Mumbai, India, pursuing my bachelor's degree with a strong interest in robotics and drones. I have completed internships in the technical, teaching, and management fields, providing valuable experience and knowledge. My ability to solve problems effectively, think creatively, work ethic, lead teams, communicate clearly, and manage time efficiently have made me a highly valuable member of any team.

● WORK EXPERIENCE

20/05/2022 – CURRENT Mumbai, India
FOUNDER AND CAPTAIN DJS ASTRA

- 1. I **formed** and **led** a team of **25 members** from various branches to gain hands-on experience in **combat robotics**.
- 2. Our team, **DJS Astra**, is interested in **combat robot research** and **development** and we **compete nationally and internationally**.
- 3. We successfully **designed** and **built** three **combat robots** weighing **8 kg, 15 kg, and 30 kg**.

11/10/2022 – 15/04/2023 Mumbai, India
DRONE PILOT AND AVIATION RESEARCH INTERN FLYO EDUVENTURES

- 1. Designed and fabricated **medical drone**.
- 2. **Testing** of various drone frame.
- 3. Conducted a **research** based on an **aerial survey**.

18/07/2022 – 17/09/2022 Houston , United States
ROBOTICS INSTRUCTOR AND HUMAN RESOURCES ASSISTANT BRAINLOX

- 1. **Coached robotics** to students aged 12-22 years.
- 2. **Managed** and **scheduled** lectures as part of the **HR team**.
- 3. **Answered** students' **questions** and concerns.
- 4. Conducted **onboarding** sessions for **newly joined interns**.

11/2021 – 11/2022 Mumbai, India
CAPTAIN DJS PHOENIX

- 1. I was the **Captain** of **DJS Phoenix**, a team of drone enthusiasts, and I **mentored** a group of **15 people** as we designed, built, and **competed** in autonomous and racing drones in various **national** and **international aerial robotics** events.
- 2. As a result of our collaborative efforts, we successfully built and piloted four drones, and we **won** prestigious competitions such as **COEX, IDRL, and iMAV**.

01/04/2019 – 01/05/2020 Mumbai, India
DIGITAL MARKETING INTERN VIRAL FISSION

- 1. Conducted **Market-based research** for brands like **Jio Saavn, OnePlus, Myntra, Vice** and **Times Network**.
- 2. Learned various software like **Adobe Photoshop** and **Adobe Illustrator**.
- 3. **Managed** the **database** of these brands and **represented** it in the **form of Gantt charts** and **graphs** using **Tableau**

EDUCATION AND TRAINING

18/08/2019 – 25/06/2023 Mumbai , India

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING Dwarkadas J. Sanghvi College of engineering

Address No.U-15, J.V.P.D. Scheme, Bhaktivedanta Swami Marg,, Opp. Cooper Hospital Vile Parle (West), 400056, Mumbai , India |

Website <https://www.djsce.ac.in/> | **Field of study** Mechanical Engineering | **Final grade** 8.16 | **Type of credits** CP |

Number of credits 180

07/04/2018 – 11/05/2019 Mumbai, India

HIGHER SECONDARY EDUCATION St. Rock's College of Commerce and Science

Address 1-B, Randive Marg, Chikoowadi, Borivali West, Mumbai, Maharashtra , 400092, Mumbai, India |

Field of study Natural sciences, mathematics and statistics | **Final grade** 60.46%

12/06/2016 – 05/06/2017 Mira road, India

SECONDARY SCHOOL CERTIFICATE St. Xavier's High School

Address Sector 5, Srishti Complex, Mira road, Maharashtra , 401107, Mira road, India | **Final grade** 78.20%

DIGITAL SKILLS

Organizational and planning skills | CAD and CAM | Decision-making | Analytical skills | MATLAB | Ansys Workbench | Solidworks | 3D printing | Python | Office 365 | Blender

ADDITIONAL INFORMATION

PROJECTS

10/09/2022 – CURRENT

Design and Fabrication of a Biomimetic -inspired VTOL Unmanned Aerial Vehicle (Solidworks 2022, Ansys 2022 R1 and Blender)

1. The project entails creating **an aircraft that mimics bird flight mechanics**.
2. The design process typically entails **studying** the biomimetic model's **aerodynamics**, **analyzing** its **flight characteristics**, and **creating** a **3D model** with CAD software.
3. Overall, the **goal** of a biomimetic-inspired VTOL UAV is to **improve flight maneuverability, agility**, and **efficiency**, which can be used in a variety of fields such as aerial surveying and search and rescue operations.

Links <https://cutt.ly/Bird-VTOL-UAV-image> | <https://cutt.ly/Report-Of-Biomimetic-inspired-VTOL-UAV->

10/07/2022 – 12/09/2022

Structural Analysis of a Drone Frame (Solidworks 2021 & Ansys 2020)

1. **Analyzed a Drone frame** as a part of the course project for the most appropriate material selection for optimum strength **using Ansys 2020**.
2. **Material selection** was based on material properties like **Tensile Strength, Modulus of Rigidity, Stiffness**, and its behavior to loads like **Deformation and Stress values**.

Link <https://cutt.ly/Structural-Analysis-of-a-Drone-Frame>

09/01/2021 – 15/03/2021

Design of a waterproof drone based on the Lotus concept (Solidworks 2021)

1. The **Lotus drone** was designed to **withstand various harsh climate conditions** such as stormy weather, heavy wind, and rain.
2. The drone's design makes it suitable for **surveillance** and **rescue missions**.
3. Lotus drone **frame** is currently under **patent** process.

Link <https://cutt.ly/Lotus---A-waterproof-Drone>

17/04/2021 – 20/04/2021

Turtle - A line following bot. (Solidworks 2021)

1. A **line-following bot** built with **Arduino** and **Smartelex** as input IR sensors.
2. The **turtle bot** was created using **Solidworks 2021**.

Link <https://cutt.ly/Turtle-Bot>

02/04/2020 – 10/06/2020

Air ambulance (Solidworks 2020)

1. This project introduces a **drone medical application**.
2. Drone-based **ideology** focuses on **bringing aid** to victims as **rapidly** as possible.

3. As a result, **the victim does not have to wait for an ambulance** that may be stalled **in traffic** or in case of **no ambulance** is available.
4. It does not require any pilots because it is **Autonomous**.
5. The drone is outfitted with a monitor and camera that **connects** the incident site **directly to the doctors**, allowing for on-the-spot First Aid Treatment.

Link <https://cutt.ly/Air-Ambulance-video>

11/03/2019 – 08/04/2019

Vertical Wind turbine (Solidworks 2019 and Blender)

1. This **portable** vertical wind turbine can be used to **produce power** in **any weather** because of its **mobility**.
2. It can be **used** for a **variety of purposes**, including long trips or journeys.
3. It **weighs** less than a kilo, which is **incredibly light**.

Link <https://cutt.ly/Portable-wind-turbine-video>

HONOURS AND AWARDS

04/2023

2nd position at DJS Nirmiti's Project competition – Dwarkadas J. Sanghvi college of engineering

1. Won **2nd rank** among **40 teams** for project titled - Design and Fabrication of biomimetic inspired VTOL UAV

Link https://cutt.ly/DJS_Nirmiti_Certificate

22/01/2023

Placed 6th among 20 teams in Drone Racing Amalthea – IIT Gandhinagar

1. Achieved **6th rank** among **top 15 teams** in Amalthea's DRA hosted by **IIT Gandhinagar**.

Link <https://cutt.ly/IDRL-Certificate>

23/04/2022

Grand Finalist of CopterHack'22 – Copter Express

1. Secured **1st rank** in **Asia** and **7th rank worldwide**.

Links <https://cutt.ly/COEX-Certificate> | https://clover.coex.tech/en/djs_phoenix_ikshana.html

12/09/2021

Winner of European Rover Challenge – ERC, Kielce University of Technology

1. Secured the **1st place internationally** after winning four of the five task-based challenges.

Link <https://cutt.ly/ERC-certificate>

06/2020

Winner of Engineering Mechanics Quiz – Potti Sriramulu Chalavadi Mallikarjunarao College of Engineering & Technology

1. Scored **92%**, among **100 contestants** from across the nation.

Link <https://cutt.ly/Mechanics-quiz-certificate>

01/06/2020

Winner of Electronic's eQuiz competition – SVKM's Shri Bhagubhai Mafatlal Polytechnic

1. I won this quiz with **96%**, edging out **40 competitors** from the state.

Link <https://cutt.ly/Electronics-e-quiz-certificate>

LANGUAGE SKILLS

Gujarati

1. **Mother Tongue**

Hindi

1. **Native Fluency**

English

1. Full working **proficiency**
2. IELTS overall band score: **7 out of 9**
3. CEFR level: **C1**

CERTIFICATIONS

G-Suite Administration Specialization

Link <https://cutt.ly/Gsuite-specialization-course>

MATLAB: Onramp

Link <https://cutt.ly/Matlab-certificate>
