

Abhinav Badegaonkar Chemical Engineering

Indian Institute of Technology Bombay

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24B0358

First Year (B.Tech.)

Male

DOB:12-09-2006

Examination	University	Institute	Year	CPI/%
Graduation	IIT Bombay	IIT Bombay	2028	9.03
Intermediate	CBSE	Vindhyachal Academy	2024	94.8
Matriculation	CBSE	Vindhyachal Academy	2022	98

### **SCHOLASTIC ACHIEVEMENTS**

- Secured **All India Rank 2364** among **.2 Million+** students in the Joint Entrance Examination Advanced
- Secured **99.86 percentile** in Joint Entrance Examination Mains among **1.5 Million**+ candidates
- Secured top 1% position in the National Standard Examination in Chemistry among 45,000+candidates

(2024) (2023)

(2024)

#### **POSITIONS OF RESPONSIBILITY**

## Developer | DevCom, IIT Bombay

Developers' Community of the Indian Institute of Technology, Bombay

(Mar '25- Present)

- · Learned and applied HTML, CSS, JavaScript, React and Flask through hands-on development and projects
- Onboarded to Messi, a QR-based meal tracking app to streamline mess operations and enhance user experience
- Collaborated in a **team of 5** to develop an Inventory Management System that empowers small shopkeepers to efficiently track daily sales, monitor stock levels in real time and generate detailed performance reports

## Junior Airframe Engineer | The IITB Rocket Team

(Oct '24- Present)

IN-SPACe recognised team of students developing high powered model rockets

- · Designed and simulated rocket components using SolidWorks and OpenRocket optimizing for efficiency
- Worked on composite structures using fiberglass and epoxy through layups and resin infusion methods
- Fabricated structural parts using advanced manufacturing techniques like 3D printing and laser cutting
- · Gained hands-on experience in aerodynamics, composite materials, and overall rocketry design

## **KEY PROJECTS**

## Quadcopter Design and Implementation | Course Project, Makerspace

(Jan '25-Apr '25)

Guide: Prof. Joseph John, Department of Electrical Engineering, IIT Bombay

- Collaborated in a **team of 6** to design and build a fully functional drone with stable flight capability
- Created optimized drone components in Fusion 360 and LaserCAD using generative design
- Fabricated custom drone parts with laser cutting and 3D printing to achieve modular lightweight builds
- Soldered PCBs and integrated ESP-WROOM-32 and Arduino Nano to enable drone control and functionality XRL8 Bot Project | Electronics and Robotics Club, IIT Bombay (Oct '24)

Worked in a team of 4 to build a joystick-controlled bot, competing on challenging obstacle tracks

- · Precisely engineered the bot's chassis for structural accuracy, ensuring optimal performance and durability
- Executed code using Arduino IDE, ESP-32, and LN298 driver, Enabled smooth control and responsiveness
- Designed an advanced sensor-equipped remote control interface to significantly improve maneuverability

## EnB Buzz | BMC Project | Entrepreneurship and Business Club, IIT Bombay

( Sept '24

Worked in a team of 3 and pitched an idea for a platform that connects clients with lawyers and provides reliable legal information

- Developed an innovative and cost-effective start-up idea on the given topic and made BMC on the same
- Learnt the fundamentals of creating a Business Model Canvas and analyzed key needs in the law sector

# EXTRA-CURRICULAR ACTIVITIES Purgued training in well elimbing under the National Sports Organia

Sports

- Pursued training in wall climbing under the National Sports Organization, IIT Bombay
- Trekked Visapur fort (3567 ft)

Technical skills

- Languages: C++, Python , JavaScript , HTML , CSS
- · Frameworks: React, Flask
- Tools: Solidworks, OpenRocket, Fusion 360, Arduino IDE, LaserCAD