



Aarohi Deshpande
Mechanical Engineering
Indian Institute of Technology Bombay

22B2192
B.Tech.
Gender: Female
DOB: 01/03/2005

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2026	

Pursuing a **Minor** in **Artificial Intelligence and Data Science** from **C-MInDS**, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Achieved **top 2** percentile in JEE Advanced & **99.63** percentile in JEE Main among **1.2 million+** aspirants (2022)
- Conferred INSPIRE SHE Scholarship by GOI for **top 1%** ranking among **1.4 million+** in the HSC Board (2022)
- Secured **Rank 3** in the CBSE Class X Board Examination across **69** schools in the KVS Mumbai Region (2020)

PROFESSIONAL EXPERIENCE

Larsen & Toubro Ltd. | Industrial Trainee | Product & Technology Development Centre (May '24-Jun '24)

- Reduced helicopter **landing time** by **85%**, designing & developing a test rig for **airworthiness certification**
- Optimized the design to withstand **1000** cycles via structural & dynamic analysis, with a **2-sec** clamping time
- Enhanced the product's performance by **component evaluation** and analyzing **instrumentation** required

Nanosniff Technologies Pvt. Ltd. | Data Analytics Intern (May '24-Jul '24)

- Analyzed over **0.24 million** data points to develop a **gas leakage detection device** for petroleum applications
- Identified gases using **time-series** and **discriminant analysis**, and classified them achieving **98.3%** accuracy

LEADERSHIP & ORGANIZATIONAL ROLES

Institute Secretary, Academic Affairs | Head, EnPoWER | UG Academic Council, IIT Bombay (May '24-Present)

Highest Nominated Student Officer | Addressing the academic and research queries of **5000+** undergraduates

Leadership	<ul style="list-style-type: none">Spearheading a team of 4 coordinators to conduct institute-wide research promotion activitiesCoordinating with 20+ bodies to enhance academic policies at the institute-wide level
Initiatives	<ul style="list-style-type: none">Developing the IITB Research Portal for 1000+ users with research opportunities & resourcesPioneering student-industry connect with IITB Research Park, linking 13+ departments
Management	<ul style="list-style-type: none">Organised SURP'24 offering 85+ research projects from 50+ faculty guides to 300+ participantsExecuted Enthuse with Dean R&D Office, orienting 1400+ freshmen to foster research pursuits

Institute Academic Coordinator | EnPoWER, UG Academic Council, IIT Bombay (May '23-Apr '24)

Selected among **4 out of 200+** students to promote research and address academic **queries of 5000+** undergraduates

- Organized a nationwide 2-day Research Conclave, attracting **100+** project submissions & a diverse audience of **300+**
- Co-authored **three booklets**: Core Intern, Novice's Guide, and GRAD Booklet aiding **500+** in research journeys

KEY PROJECTS

Head-Movement Controlled Wheelchair | Institute Technical Summer Project (Apr '23-Aug '23)

Led a team of **4** to a **top-five** ranking among **100+**, showcasing machine design expertise with a **60 kg** load capacity

- Designed **head-tilt** controlled wheelchair enhancing mobility for **0.4M+** yearly, especially **quadriplegia** patients
- Optimised the performance of the **Arduino-controlled** system using an **IMU sensor** and **high-torque motors**

Generated GAN-Based Metal Oxide Classification | Course Project | Guide: Prof. Alankar (Mar '24-May '24)

- Achieved an accuracy up to **86.72%** by evaluating the performance of **SVM**, **Random Forest**, & **k-NN** classifiers
- Trained a neural network with **cyclic learning rates** & **SOM** to **87%** accuracy, & implemented Conditional GANs

Femtosecond Laser Micro-fabrication System | SURP 2023 | Guide: Prof. Deepak Marla (Jun '23-Jan '24)

- Performed **micro-pillar** pre-fabrication, **ANSYS laser heating simulations**, and reviewed laser cladding coating
- Developed remedies for thermal crack propagation in glass/Si wafers, & tested KOH to minimize **thermal damage**

EXTRACURRICULAR ACTIVITIES

Language & Culturals	<ul style="list-style-type: none">Secured Gold Medal in Sanskrit Olympiad organized by Sanskrita Bharati Educational TrustTrained in Bharatanatyam for 2 years, completing Alarippu and Pushpanjali dance stagesRanked 3rd in Union Bank of India's All-India Painting Competition on Vigilance Awareness
Social	<ul style="list-style-type: none">Selected as school representative at WWF Student Conference for wildlife conservation
Miscellaneous	<ul style="list-style-type: none">Smartphone-based Portable Microscope project selected for All-India Makerspace ConclaveAssessing VC exit strategies, investment stages, & key factors for startups via Finsearch'24