



Pratiksha Pimpalshende
Chemical Engineering
Indian Institute of Technology Bombay

190020083
B.Tech.
Gender: Female
DOB: 10/3/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	
Intermediate	MSBSHSE	Dr. Ambedkar College Deekshabhoomi, Nagpur	2019	92.92%
Matriculation	CBSE	School Of Scholars Wanadongri, Nagpur	2017	10

Pursuing a **Minor in Management** from SJMSOM, IIT Bombay

Minor CPI: 9.00

Scholastic Achievements

- Achieved a percentile of **99.22** in the Joint Entrance Exam Main among **0.9 million+** aspirants ('19)
- Ranked amongst the **top 5%** in Joint Entrance Exam Advanced among **0.17 million+** candidates ('19)
- Secured a percentile of **99.90** in MHTCET Examination from a pool of **0.4 million+** candidates ('19)
- Received the certificate of appreciation for exemplary performance in Physics by **MSBSHSE** ('19)
- Felicitated by Plant Head, **Mahindra & Mahindra, Nagpur** for scoring **99%** marks in SSC ('17)
- Awarded **Certificate of Merit** in state level Maharashtra Talent Search Examination ('15)

Professional Experience

Inside Sales Intern | **Entri Software Pvt. Ltd.**

(Jun'21 - Present)

EdTech startup providing courses for GATE, government services and job preparation in regional languages

- Restructuring the **Campus Ambassador** Program by introducing **college collaboration** methodologies
- Critically analyzed the company website for new features like course reviews, results, launch of **web app**
- Liaising with **20+** colleges in the **Delhi** region to expand the services in **GATE** exam preparation

Leadership Roles

Competitions Manager | **AZeotropy'22**

(Jun'21 - Present)

*India's largest intercollegiate Chemical Engineering symposium with **11K+** footfall from **300+** colleges*

- One of the **15 core** members of a **2 tier** team responsible for conceptualizing and executing the symposium
- Devising a distinctive quizzing format for CoP, with a participation of **3000+** students over **30+** centers
- Revamping the format of **4** existing competitions, with a target of **8-9% y-o-y** increase in participation
- Diversifying** the competitions by augmenting them with topics like data analysis, disaster investigation

Coordinator | **Alumni Student Mentorship Programme**

(Jun'20 - May'21)

*Part of a **3-tier institute body** responsible for fostering relations between **50k+** alumni and students*

- Consolidated a mentor pool of **200+** alumni across **10+** sectors like consulting, research, IT, core
- Coordinated the mentor allocation process, proficiently mapping **200+** mentors to **350+** students
- Structured and executed **10+** sessions of **4** events, aiming to increase the student-alumni interaction

Key Projects

Adsorption & Reaction Modeling for contaminant removal

(Jun'21 - Present)

- Studying **adsorption** and **reaction** of contaminants in water over **nanoparticle impregnated fibers**
- Developing regression model in **MATLAB** to calculate the **rate constant** for the reaction of contaminants over nanoparticles and the amount of contaminant adsorbed at **equilibrium** in a **batch process**

Temperature regulation inside Ship Engine Room | **Course Project**

(Jan'21 - May'21)

Guide: Prof. P Sunthar, Prof Venkat Gundabala, Chemical Engineering, IITB

- Designed a **heat exchanger** system to control **temperature** and **humidity** inside the ship engine room
- Achieved a temperature reduction of **10°Celsius** with constraints of space, coolant availability, and fouling

Glacier Mapping | Centre of Studies in Resources Engineering, IITB

(Feb'21)

Guide: Prof. Gulab Singh | Course Project: Remote Sensing and GIS applications to Cryosphere

- Studied the important characteristics of bands in **LANDSAT** data for cryospheric applications using **QGIS**
- Generated **NDSI**, **true** and **false** colour images for mapping glacial features, snow-cloud differentiation

Nanoengineered Superhydrophobic Surface | Literature Review | Course Project (Nov'20)

Guide: Prof. Guruswamy Kumarswamy, Chemical Engineering, IITB

- Presented a detailed analysis of a research paper on **liquid slip** over designed superhydrophobic surface
- Studied the experimental findings and design of surface structures for **slip length** and **drag reduction**

Hyperloop IITB | Student Technical Project

(Feb'20 - Jun'21)

- One of the **50 members** of a student team, working towards designing a **prototype Hyperloop pod**
- Worked with the aerodynamics subsystem to develop the **outer aerodynamic structure** of the pod
- Constructed the pod from given coordinates and developed the velocity profile using **2D** and **3D** analysis

XLR8 | Electronics and Robotics Club, IIT Bombay

(Aug'19)

- Worked in a team of 4 to construct a **Bluetooth** controlled obstacle crossing bot from scratch
- Designed the electrical circuit using **IC7805**, **ICL293D** and, **AT Tiny** on a perforated circuit board
- Implemented **differential controlling mechanism** to reduce turning radius for better maneuverability

Technical Skills

Programming	Python, MATLAB, \LaTeX
Software Packages	AutoCAD, SolidWorks, ANSYS, Adobe Photoshop, Adobe Illustrator

Extracurricular Activities

- Bagged **3rd** position in wall painting general championship among **18** participating hostel teams
- Skilled in **Kathak**, certified by Akhil Bhartiya Gandharva Mahavidyalaya Mandal, Mumbai
- Completed training in **Yoga**, spanning over **2 semesters** under the National Sports Organization
- Oversaw execution of international summit on **The Industry 4.0** during **TechFest**, IIT Bombay
- Hosted a **Acapella** competition **Conchord** during 49th Edition of **Mood Indigo**, IIT Bombay
- Participated as **Student Parliamentarian** in Times School Parliament on **No Detention Policy**
- Awarded Certificate of Appreciation for **best English essay** in national level essay and painting competition organized by **Ministry of Petroleum and Natural Gas, Govt. of India**

Courses Undertaken

Chemical Engineering	Transport Phenomena, Thermodynamics (I&II), Heat Transfer, Fluid Mechanics, Chemical Reaction Engineering*, Solid Mechanics*, Mass Transfer*, Chemical Engineering Lab (I & II)*, Advanced Transport Phenomena*
Mathematics	Calculus, Linear Algebra, Differential Equations, Computational Methods Lab, Numerical Analysis, Data Analysis
Minor	Operations Management, Marketing Management*
Certified	Programming for Everybody, Python Data Structures, Design Bootcamp
Others	Computer Programming and Utilization, Economics, Psychology, Electrical and Electronic Circuits*, Engineering Graphics and Drawing, Remote Sensing and GIS applications to Cryosphere

(*to be completed by Nov'21)