



Samagra jain  
Chemical Engineering  
Indian Institute of Technology Bombay

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B.Tech.  
Gender: Male  
DOB: 10/27/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	

Pursuing a **Minor degree** in **Management** from Shailesh J. Mehta School of Management, IIT Bombay

## PROFESSIONAL EXPERIENCE

### Vocational Trainee | National Fertilizers Limited

(Nov'21-Dec'21)

India's largest government corporation in Fertilizer Sector with turnover of over **Rs. 75 billion**

- Acquired hands-on-experience in ammonia production by controlling all variables & units on a **virtual simulator**
- Undergone a **month** long training program at National Fertilizers Limited Vijaypur Ammonia Production plant
- Studied the processes of Desulphurization, Reformation, Methanation, **Ammonia Synthesis** & Ammonia Storage
- Attended sessions on **Energy Saving techniques** and **Safety Measures** required to run a Fertilizer plant

### Strategy and Process Excellence Intern | Yaantra

(May'22-Jun'22)

India's leader in Recommerce & daughter company of Flipkart

- Identified and eliminated the **process gaps** resulting in **30%** reduction of End-to-End **TAT** for order completion
- Analysed the selling pattern of consumers and accentuated the most and least sold smartphones to the finance team
- Identified and highlighted the **Technological automation** required for **operations optimisation**
- Curated an exclusive report for **Flipkart** capturing **customer** and **company** journey in re-commerce of phones

## POSITIONS OF RESPONSIBILITY

### Department Academic Mentor | Student Mentorship Program | IIT Bombay

(May'22-Present)

- Mentoring **6** chemical engineering sophomores catering to their academic needs and co-curricular endeavors
- Selected out of **98** applicants in a team of **40** members for student mentorship program to build a support system for **160+** second year students based on rigorous interview, interpersonal skills and positive peer reviews
- Responsible for organising and managing **10+** events and help sessions targeted towards **250+** students

### NEC Mentor | The Entrepreneurship Cell | IIT Bombay

(Oct'21-Feb'22)

- Curated tasks for basic and advanced tracks in a structured manner in National Entrepreneurship Challenge, a pan India initiative to develop sustainable Entrepreneurship Cells in **700+** institutions in **90+** cities in India
- Mentored **40 colleges**, providing them with support and guidance to help them grow their Entrepreneurship cells
- Ideated and hosted the NEC finals, which saw the participation of **20 colleges** in **15+** cities of the country

### Technical Mentor: Summer of Science | Maths & Physics Club | IIT Bombay

(May'22-July'22)

- Guided **4** second-year students for reading project in the field of **Game Theory & Mechanism Design**
- Compiled resources for a multi-dimensional learning experience and introduce the various opportunities available in **economics**, **politics**, **operations**, **psychology**, **evolutionary biology**, and **business** corresponding to the field

## KEY PROJECTS

### Enhancement of Exhaustive silencer in Bike | Course Project: Heat Transfer

(Jan'22-Apr'22)

- Worked in an **8** membered team to come up with an optimal thermal solution to significantly reduce the Body temperature of bike silencer by introducing dimple patterns and changing material to ceramic coated stainless-steel
- Reviewed various research papers to understand effect of structure and material on heat transfer in silencers

### Flow pattern in a draining tank | Course Project: Process Fluid mechanics

(Jan'22-Apr'22)

- Studied the effects of flow of a fluid through the exit of a draining tank under laminar and turbulent conditions
- Created a two-dimensional mesh of the exit using **Gmsh** and simulated the flow through it using **Openfoam**
- Implemented the Large Eddy Simulation model and **pisoFoam** solver to simulate the turbulent flow using Reynolds Averaged Simulation and **icoFoam** solver to simulate the laminar flow through the exit of the draining tank

## EXTRACURRICULAR ACTIVITIES

- Dedicated **80+** hours of social service as a volunteer of National Service Scheme (**NSS**), IIT Bombay (20'-21')
- Curated a case study on the effect of Covid-19 on the **Indian Real Estate market** in a competition conducted by Consult Club, IIT Bombay in collaboration with **Property Pistol** (2021)
- Participated in the Virtual Stock Market workshops and competition organised by **E-Cell**, IIT Bombay (2021)
- Successfully completed the penultimate level of Universal Concept of Mental Arithmetic System (**UCMAS**). (2015)
- Represented school team in **Basketball** Inter School Sports Competition in Vandana Convent School (2015)
- Hosted **20+** events in school Annual function which generated the footfall of **4000+** spectators (2017)
- Received Certificate of Merit for 2 consecutive years in Science, Maths, English and General Knowledge Olympiad organised by SilverZone Foundation.