



Muskan Jain  
Chemical Engineering  
Indian Institute of Technology Bombay

19D170016  
B.Tech.  
Gender: Female  
DOB: 1/3/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	

Pursuing a **Minor Degree** in **Computer Science and Engineering**

#### SCHOLASTIC ACHIEVEMENTS

- Among the top **9%** students awarded change of branch for showcasing exceptional academic performance ('20)
- Secured **99.7** percentile in JEE (Joint Entrance Examination) Mains, 2019 amongst **0.9 million+** candidates ('19)
- Awarded **National Top 1%** out of **45000** candidates in National Standard Examination in Chemistry (NSEC) ('18)

#### PROFESSIONAL EXPERIENCE

**Technology Consulting Intern** | Ernst and Young Global Limited (May'21-Jul'21)

Worked on **3 client facing projects** for 4 major companies focusing on compliance digitization and operational efficiency

- Curated the scope of **compliance digitization** for a major firm, by profiling the available audit workflow management tools
- Developed **IoT based solution**, to aid high scale industrial manufacturing operations, leading to **20% higher** product count
- Analysed **10+ fraud risk areas** for a Fintech major, resulting in advancement of an automated collection optimization tool
- Customized a cloud-based Regulatory Compliance tool, to address data protection and **privacy regulation issues** in Nigeria

**Web Developer** | Dass Scientific Research Labs Pvt. Ltd. (Dec'20-Jan'21)

A start-up engaged in simplifying advanced mathematical concepts and promoting them globally

- Developed a user-friendly online **bridge game website** with optimised checkout pages, to increase the customer purchases
- Enhanced player experience by creating an **upscale dashboard** to auto-update tournament scores using exported XML files

#### POSITIONS OF RESPONSIBILITY

**Institute Internship Coordinator** | Institute Placement Team, IIT Bombay (Jun'20-Present)

Part of **24-member** team entrusted with streamlining the internship process as a liaison for **2000+** students and **300+** recruiters

- Establishing new relations with executives across **200+ firms** in Analytics, Finance, Consult, Management and FMCG sectors
- Coordinating with **300+ Universities** over the globe to procure opportunities to increase International Research exposure
- Targeting a **20% y-o-y increase** in internship opportunities by analysing old statistics, targeted contacting and data-mining
- Organizing institute-wide pre-internship talks, tests, Interview sessions, Group Discussions and Resume-Making sessions
- Developed a series of **Aptitude and Coding tests** at the institute level, aiding the pre-interview preparation of the students

**Institute Academic Coordinator** | EnPoWER, Undergraduate Academic Council, IIT Bombay (May'20-May'21)

Selected among **12** out of **100+ applicants**, responsible for promoting research among **4500+** undergraduates

- Executed iSURP – a UG research program offering **150+** projects(**100% y-o-y increase**) to **600+** students and **75+** professors
- Organised Virtual Research symposium in collaboration with **NTU, Singapore** with **60+** participants in **7 engineering fields**
- Hosted **ENTHUSE**, the Freshmen Research Orientation with a panel of **16** IIT Bombay professors and **750+** undergraduates

**Sports Representative** | National Cadet Corps | IIT Bombay (Sep'19-Jun'20)

- Organised **Sports GC, Intercollege Sports Competitions**, with **300+** participants, achieving **100% y-o-y** increase in activities
- Executed weekly sports sessions with **8** different sports activities for **150+** students while dealing with professional **coaches**

#### KEY PROJECTS

**Algorithmic Trading** | FinSearch | Finance Club, IIT Bombay (Jun'21-Jul'21)

- Developed a Python-based **Pair trading algorithm**, to identify and trade pair of similar stocks in a market neutral strategy
- Backtested the algorithm in the Indian financial market, using real-time stock cases, with an average **profit margin** of **4-6%**
- Scrutinized **trading systems** like mean reversion, volatility-based delta hedging, calendar spread & momentum portfolios

**Movie Recommendation System** | Course Project | Guide: Prof. Abir De (Mar'21-May'21)

- Created a predictive model, to make web content more personalised, using **item-based collaborative filtering** in python
- Implemented **KNN Algorithm** to classify data points using item-feature similarity, returning the top K nearest neighbours
- Optimised the model using Mini-batch **Gradient Descent algorithm**, to get top 10 predictions achieving **90%** test accuracy

#### EXTRA-CURRICULAR ACTIVITIES

<b>Certifications</b>	<ul style="list-style-type: none"><li><b>Data Analysis</b> using Excel, by Microsoft</li><li>Basic Financial Markets, by Yale University</li></ul>	<ul style="list-style-type: none"><li><b>Investor Bootcamp</b>, 2021 by 365 Careers</li><li><b>Python</b> for finance, by 365 Careers</li></ul>
<b>Technical Skills</b>	<b>Languages:</b> C++, Python, MATLAB, SQL, R, HTML, CSS   <b>Softwares:</b> PowerBI, MS Office, LaTeX, AutoCAD <b>Frameworks and Libraries:</b> Matplotlib, Pandas, NumPy, Seaborn, SciPy, Tkinter, Beautiful Soup, Astropy	
<b>Sports</b>	<ul style="list-style-type: none"><li><b>1<sup>st</sup></b> in intercollege <b>Badminton</b> tournament</li><li>Completed year long training as <b>cadet</b> in NCC</li></ul>	<ul style="list-style-type: none"><li>Led the winning team in intercollege <b>Volleyball</b> match</li><li>Represented hostel in <b>Crossy GC</b> (3.3 km in 18 mins)</li></ul>
<b>Social</b>	<ul style="list-style-type: none"><li>Counselled <b>50+</b> school going children as a part of Abhyuday's, IIT Bombay <b>Career Counselling</b> Campaign</li><li>Structured a <b>Digital Literacy Program</b> with Womenite, Delhi to guide <b>1000+</b> underprivileged students</li></ul>	