Aadi Bansal   210020001

Chemical Engineering   B.Tech.

Indian Institute of Technology Bombay   Gender: Male

DOB: 09/03/2004

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2025	

Pursuing a **Minor** in the Department of **Computer Science & Engineering**, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Ranked amongst the **top 1.1%** in JEE Advanced examination among **0.14 Million+** candidates   *(2021)*
- Placed in top **0.28** percentile in the JEE Mains examinations from a pool of **1 Million+** candidates   *(2021)*
- Secured a state rank of **12** in National Talent Search Examination (**NTSE**) among **70K+** candidates *(2019)*
- Awarded with an **AA grade** (2 out of 70) for exceptional performance in CL246 **Heat Transfer** course *(2023)*

PROFESSIONAL EXPERIENCE

Supply Chain Intern | Eris Lifesciences Ltd   *(Jun'23 - Jul'23)*
Part of Supply Chain Management team, end-to-end planning for Anti-Diabetes & Cardiovascular products
- Achieved over **85% Forecast Accuracy** and less than **5% Forecast Fidelity** by meticulously analyzing historical sales data, market trends, and pertinent factors to precisely forecast pharmaceutical product demand
- Evaluated Key Production Indicators(**KPI**) and consensus forecast in collaboration with the marketing team
- Reduced stockholding period of pharmaceutical products by **5%**, improving **Inventory** control and holding cost

KEY PROJECTS

Discovery of Bimetallic Catalysts with DFT-Assisted Machine Learning   *(Jun'23 - Present)*
Research Project | Summer Undergraduate Research Program, IITB | Guide: Prof. Ojus Mohan
- Optimized the existing **RFR** and **GPR** ML models for ethanol reforming DFT Data with **100+** data points
- Implementing improved **ML models** for bimetallic catalyst discovery for **CO2 conversion** reactions
- Conducting in-depth analysis of **5+** research materials and **DFT** calculations for missing experimental dataset

Optimization of a Car Cabin Temperature Control System | Course Project   *(Jan'23 - Apr'23)*
Guide: Prof. P Sunthar, Department of Chemical Engineering, IIT Bombay
- Spearheaded a **team of 8** to design a system that minimizes the temperature inside a parked **car's cabin**
- Conducted a detailed thermal analysis using computational fluid dynamics (**CFD**) techniques in **OpenFOAM**
- Employed **heat transfer** coefficient calculations to investigate heat transfer mechanisms within the car cabin
- Developed a **cost-effective** custom car cabin **Insulation**, achieving an exceptional **30%** temperature reduction

Face Recognition using Deep Learning CNN in Python | Course Project   *(Jan'23 - Apr'23)*
Guide: Prof. Abir De, Department of Computer Science and Engineering, IIT Bombay
- Implemented a Deep Learning Pipeline based on **FaceNet** using Sequential APl in **TensorFlow** -Python
- Explored advanced techniques like **face alignment**, **landmark detection** to enhance the model's performance
- Developed and preprocessed a **CNN** using the VGG16 architecture demonstrating an accuracy of over **70%**

Unveiling the Chemical Industry: Techno-commercial aspects | Learner's Space   *(Jun'23 - Jul'23)*
- Assessed the **techno-commercial challenges** faced by chemical businesses in today's competitive landscape
- Analyzed the **chemical industry** extensively considering factors such as potential profitability & market trends
- Explored the techno-commercial feasibility of integrating **sustainable practices** within the chemical industry

POSITIONS OF RESPONSIBILITY

Mentor | College Representative Program | Abhyuday, IIT Bombay   *(Jul'23 - Present)*
*Largest student-run social body for leadership and impact in India | Patronage:**UNICEF, PETA** | Reach **5M+***
- Guiding **8+** college representatives to ensure smooth execution of tasks to create an impact in **5** colleges
- Empowering CRs to spearhead **impactful events**, workshops, and campaigns driving positive social change

Pronites Coordinator | Mood Indigo, IIT Bombay   *(Jun'22 - Dec'22)*
*52nd edition of Asia's largest college cultural festival | footfall:**146,000+** | events:**240+***
- Working in a team of **60**, responsible for smooth execution of flagship concerts attended by a crowd of **100K+**
- Conceptualizing and organizing **Livewire - the biggest semi-professional** Indie band competition in Asia
- Travelling and hosting camps in **5+** cities of India, capturing talent from diverse geographies across the country

TECHNICAL PROFICIENCY

- **Programming:**   C++, Python, NumPy, LaTeX, Markdown, HTML, CSS
- **Software:**   MATLAB, OpenFOAM, Git, MS Office, Adobe Photoshop, Google Workspace

EXTRACURRICULAR ACTIVITIES

Competitions	• Secured a **Top 16** position among **450+teams** that participated in CodeWars v1
	• Participated in **EnB buzz** to build a business model for EV's and **a detailed BMC**
Social work	• Head of public **awareness** commitee at **DISHA**- an NGO that organizes camps and spreads awareness on **Diabetes** and its management among rural population around Agra
	• Volunteer at **SMRITI**- an NGO that works towards the social upliftment of women