Aashwin Agrawal

Chemical Engineering

Indian Institute of Technology Bombay

190020001

B.Tech.

Gender: Male

DOB: 24-09-2001

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

Pursuing a minor degree in **Entrepreneurship** from Desai Sethi School of Entrepreneurship, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- ○ Secured **99.90%ile** in JEE Mains exam with **100%ile** in math among **1.2 million** candidates ['19]
- ○ Achieved **All India Rank 1460** in JEE Advanced exam out of **245,000** shortlisted candidates ['19]
- ○ Secured **All India Rank 549** in Technothlon, an International logic exam held by IIT Guwahati ['18]
- ○ Secured **State Rank 3** in Madhya Pradesh talent recognition exam conducted by FIITJEE ['17]

KEY PROJECTS

School Mapping | *Summer Undergraduate Research Project* [Jun' 21 - Present]
Guide : Prof. Milind Sohoni & Jitendra Shah, Department of CSE & CTARA, IIT Bombay
- ○ Established static education theme for **Community GIS** portal using **django** & **leaflet** and developing interactive **query builder** for that website which will be community oriented and community driven
- ○ Creating a platform for public domain databases for schools by exporting **1 million+** data of schools and analyzing that using **QGIS, SQL** and **python libraries** like numpy, pandas, matplotlib, seaborn, etc.
- ○ Aiming to geocode **1 million+** schools using **Google API & OSM** and publish layers on **geoserver**

Heat Transfer in Clothing system | *CL246 Course Project* [Jan' 21 - May' 21]
Guide : Prof. P. Sunthar, Department of Chemical Engineering, IIT Bombay
- ○ Obtained **optimal parameters** for a clothing such that it shows **minimum** variation in temperature with temperature changes in surroundings using **Computational Fluid Dynamics** on human body
- ○ Led a team of **8** as a Generator and presented the idea and solutions to a class of **120+ students**

Van der Pol Equation Solver | *CL244 Course Project* [Dec' 20]
Guide: Prof. Sarika Mehra, Department of Chemical Engineering, IIT Bombay
- ○ Solved Van der Pol equation by **3rd order Runge Kutta** & **3rd order Adams-moulton** algorithms
- ○ Compared the two algorithms by varying the parameters to obtain an **optimal** solution in **MATLAB**
- ○ Analyzed the stability & accuracy of the two algorithms w.r.t. **ODE45** & **ODE23s** solvers on MATLAB

POSITIONS OF RESPONSIBILITY

Technical Councillor | *Hostel 9, IIT Bombay* [May' 21 - Present]
*Elected representative of **500+** hostel residents in Institute Technical Committee*
- ○ **Leading** the hostel technical council responsible for enhancing the overall technical culture of the hostel
- ○ Structuring the allocation of a budget of **INR 50K** into GCs, tech room inventories and projects
- ○ Aiming to initiate **H9 Season of Code** and **technical projects** to improve technical skills of residents
- ○ **Ideating** complaints forum, Art and Design portal and canteen order portal to make hostel life easier

Interview Coordinator | *Placement Cell, IIT Bombay* [Dec' 20]
- ○ Coordinated with a team of **250+ members** for interviews and tests of **1500+ students** for **5+ firms**

PROFESSIONAL EXPERIENCE

App Development, Technology Commercialization and Marketing Intern [Jun' 21 - Jul' 21]
Dass Scientific Research Labs Private Limited
- ○ Created **2 applications**, for plotting mathematical graphs using **MATLAB APP designer**
- ○ Performed **Pilot testing** of Contract Bridge game application and detected **bugs** during gameplay
- ○ Designed marketing brochures, email sequences and authored website content to launch app into market

SKILLS AND EXTRA CURRICULARS

Technical	○ Python, C++, MATLAB, SQL, AutoCAD, Solidworks, QGIS, pgAdmin4, HTML, CSS ○ Pursuing **Python for Data Science and Machine Learning Bootcamp** on Udemy
Sports	○ Participated as a **Skating athlete** in Gwalior got talent search-2014
Social	○ Participated in Gwalior mini **Marathon**, run for Smart City organized by SCBC Gwalior ○ Visited Mayurbhanj to understand the functioning of **NGO** focused on **Organic Farming**
Cultural	○ Performed as **Keyboardist** in **5** events in school and learnt **Violin** as a part of NSO course