Anay Arora   22B3939

Electrical Engineering   B.Tech.

Indian Institute of Technology Bombay   Gender: Male

                                               DOB: 25/03/2004

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2026	

Pursuing a **Minor** in the **Centre for Machine Intelligence and Data Science**

SCHOLASTIC ACHIEVEMENTS

- Awarded **branch change** to Electrical Engineering BTech for **academic excellence** in the first year *('23)*
- Achieved **Department Rank 15** out of 120+ students in Electrical Engineering BTech programme *('24)*
- Achieved **All India Rank 712** in JEE Advanced 2022 out of **0.16 million** candidates   *('22)*
- Achieved **All India Rank 789** in the Kishore Vaigyanik Protsahan Yojana Exam (KVPY), SX   *('22)*

RESEARCH EXPERIENCE

Generating Limit Order Book from order messages | *Research Project*   *(Apr'24- Jun'24)*
Guide: Prof. Vivek Rajvanshi, Finance and Control, IIM Calcutta

- Analyzed **high-frequency** trading strategies and their **frontrunning** of non-HFTs using order book data
- Converted **order book** data into a **trade book** and separated trades using the **Lee-Ready algorithm** to identify the liquidity-providing and liquidity-removing sides of trades for **net marketable buying**
- Utilized net marketable buying to create **portfolio sorts**, and plotted cumulative HFT and non-HFT standardized net marketable buying each second after the sort to observe HFT influence on non-HFTs

KEY PROJECTS

Options Pricing Models and their Accuracies | *Finsearch*   *(Jul'23- Sep'23)*
Finance Club, IIT Bombay

- Conducted an in-depth study of options pricing models, including the **Monte Carlo simulation**, the **Black-Scholes model**, and the **Binomial model**, differentiating their methodologies and principles
- Engineered a robust **Python implementation** of the Black-Scholes model for precise option valuation, leveraging current data extracted from the Nifty 50 index which was **filtered and cleaned**

Business Analysis Project | *SOM-101 Course Project*   *(Apr'23)*
Guide: Prof. Ashish Pandey, Shailesh J. Mehta School of Management, IIT Bombay

- Conducted strategic analysis of Amazon, using a **GE 3x3 matrix** to categorize its subsidiaries, and evaluated its generic strategy, with an emphasis on either cost leadership or product differentiation
- Analyzed Amazon's **organizational structure**, deducing a **customer-centric** divisional approach

Technical Indicators in Python | *Self Project*   *(May'23)*

- Engineered technical indicators with Python, including **Moving Averages, Bollinger Bands, and RSI**
- Analysed Netflix stock, using custom technical indicators, and **visualized the findings** using matplotlib

POSITION OF RESPONSIBILITY

Department Academic Mentor | *Student Mentorship Programme*   *(May'24 - Present)*

- Selected from a pool of **170+** candidates based on interviews and peer reviews to mentor sophomores
- Providing **mentorship and guidance** to **12** sophomores, assisting them in making informed decisions regarding their academic pursuits and extracurricular activities and helping them navigate their curriculum
- Contributing actively to the **Resources and Outreach** subgroup by collecting course reviews

EXTRACURRICULAR ACTIVITIES

- Assumed a pivotal role within VFP (Voice for Purpose) under NSS(National Service Scheme) by crafting audiobooks, **enhancing educational accessibility** and inclusivity for visually impaired individuals *('23)*
- Constructed educative assignments for 6th-grade students when volunteering at LCCWA under NSS *('23)*
- Distinguished as the **6th-ranked player** in the Scrabble General Championship(GC) qualifiers   *('23)*
- Spearheaded marketing efforts as an organizer for Impulse, Electrical Engineering department's fest, **showcasing effective promotional strategies and increasing event visibility**   *('22)*