



Utkarsh Agiwal
Mechanical Engineering
Indian Institute of Technology Bombay

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B.Tech.
Gender: Male
DOB: 26/6/2002

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

Pursuing a **Minor** degree from the **Computer Science and Engineering** department, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Awarded a branch change to **Mechanical Engineering** (Top **11%**) for exemplary academic performance [2021]
- Secured a percentile of **99.25** in **JEE Advanced** | Achieved a percentile of **99.56** in **JEE Main** [2020]
- Recipient of the prestigious **KVPY** Fellowship by Department of Science and Technology(DST), Govt. of India [2020]

INTERNSHIPS

Research Associate | **Telfer School of Management, University of Ottawa** [May'22 - Jul'22]
Received Letter of Recommendation for exemplary performance from Mr. Shantanu Dutta, Professor of Finance

- Performed a **literature review** on the measures of **readability** of financial texts and corporate disclosures
- Replicated the **tone shift** study using Loughran and McDonald dictionary and valence shifters on **80+** Indian firms along with Flesch score, thereby checking its **correlation** with other readability scores and bankruptcy
- Restructured the data by oversampling the minority class using **SMOTE**, achieving an accuracy of **85.1%** with the **Random Forest Classifier** along with **LDA**, outperforming **Altman Z-score** by **6%** for predicting bankruptcy

POSITIONS OF RESPONSIBILITY

Department Academic Mentor | *Student Mentor Program* [May'22 - Present]
Part of a team with 43 members aiming to play a facilitative, supportive and developmental role for junior students

- Monitoring the academic performance of **6 sophomores** by providing them with academic guidance and counseling
- Involved in **revamping** and **updating** the DAMP Blog with course reviews, minor, honor, and elective reviews

Data Analytics and Visualization Team (UGAC, IITB) | *Core Team Member* [Jul'22 - Present]
Part of a diverse 12-member team working to provide data-centric solutions to the institute and external organizations

- Selected from **100+** candidates spanning all years and programs via rigorous technical assignment and interview
- Dissected and interpreted **national data** on power and health, collaborating with Prof. Sarawagi from CSE, IITB

Teaching Assistant (TA) | *Computer-Aided Design (ME-119)* [Mar'22 - Jun'22]
Amongst the top few students selected out of 100+ applicants for this role upon past academic performance

- Mentored **200+** freshmen in engineering graphics and drawing, addressing their conceptual and logistical problems
- Responsible for conducting weekly sessions for **21** students, serving their doubts and queries spanning several domains

KEY PROJECTS

Data Analysis of the Indian Premier League | *Winter in Data Science* [Dec'21 - Jan'22]
Analytics Club, Undergraduate Academic Council, IIT Bombay

- Performed **Exploratory Data Analysis** on IPL dataset for obtaining statistics of all teams and players of 12 seasons
- Carried out **feature engineering** and used **ANN** to predict the winner of the 2020 dataset with an **88.33%** score

Natural Language and Processing | *Summer of Science* [May'22 - Jul'22]
Maths and Physics Club, IIT Bombay

- Explored various **word embeddings** such as TF-IDF, Word2Vec, CBOW, GloVe, and **RNN & Siamese Networks**
- Implemented a tweet emotion recognition model using **bidirectional LSTMs** with an accuracy of **88.65%**

Option Pricing Models and their accuracy | *FinSearch* [Jun'22 - Present]
Finance Club, Undergraduate Academic Council, IIT Bombay

- Extensively read about derivatives & options pricing and the mathematical theory behind **Brownian Motion**
- Deployed Monte-Carlo simulations using **Black-Scholes** Model in Python to **predict** the option prices of Tesla

EXTRA-CURRICULAR ACTIVITIES

Social	<ul style="list-style-type: none">Guiding students over Quora with a total of 450K+ views and 10K+ monthly views [2022]
Chess	<ul style="list-style-type: none">Best Freshie Award at the Institute Chess Open, IIT Bombay [2021]Secured Runner-Up position at the Freshmen Chess Open, IIT Bombay [2020]Awarded an International rating of 1285 by International Chess Federation, FIDE [2017]Completed year long Chess training under National Sports Organization (NSO) [2021]
Misc.	<ul style="list-style-type: none">Among the top 5 teams that qualified for the Aavhan Case Study Competition finals [2021]