Maheesh Baijal 190110042
Metallurgical Engineering and Materials Science **B.Tech.**
Indian Institute of Technology, Bombay **Gender: Male**
DOB: 20-08-2001

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

Pursuing a **Minor** in **Artificial Intelligence and Data Science** under **C-MInDS, IIT Bombay**

SCHOLASTIC ACHIEVEMENTS

- **Ranked 2nd** among 93 B.Tech students in the Department of Metallurgical Engineering and Materials Science   [2021]
- Recipient of the renowned **Uttar Pradesh Science Talent Search Examination Scholarship** (UPSTSE)   [2017-18]
- Secured an **SPI** (Semester Performance Index) of **9.84** in the third semester with **AA** grade in 5 courses   [2020]
- Awarded an **AP** grade for exceptional performance in the course MM152: **Materials and Technology**   [2019]

POSITIONS OF RESPONSIBILITY

➢ **Academic Mentor| Department Academic Mentorship Program| IIT Bombay**
Part of the Student Mentorship Program assisting 150+ students academically   [May 2021-Present]

- Selected from among **74 applicants** on the basis of SOP, rigorous interviews, social behavior and peer reviews
- Mentoring a batch of **6 sophomores** catering to their academic needs and helping them attain overall stability
- Collaborating with seniors and other department bodies to organize help sessions and lab visits for the students

➢ **Data Analytics And Visualisation Team Member | Undergraduate Academic Council | IIT Bombay**
Part of IIT Bombay's official body working in the field of Data Science   [Jul 2021-Present]

- Selected out of **70+ applicants** based on a rigorous assignment and an interview on technical skills and teamwork
- Part of a team of **13** responsible for **analysing** the **data** provided by the **institute,** deriving **valuable insights** from it and presenting them to the student community in a comprehensive manner

KEY PROJECTS

➢ **Impact of Covid-19 on consumer behaviour**| *Course Project| Consumer Psychology*   [Apr-May 2021]

- Extensively explored available literature on the topic, compiled relevant news reports and **surveyed 70+ youth** (target group)
- Compared the **behaviour** of respondents **before** and **after** the Covid-19 lockdown through **paired t-test analysis**
- Derived **managerial** and **research implications** based on the results, prepared a **report** and obtained **highest marks** for the same

➢ **Loan approval system using ML** | *Course Project | Programming for Data Science*   [Dec 2020]

- Using **numpy**, **pandas**, **matplotlib** libraries in **Python**, performed **exploratory data analysis** on the **loan approval data** of a **bank**
- Trained different **classification models** like **Random Forest classifier**, **Decision Trees** and **Logistic Regression** on the data
- Achieved a maximum **F1 score** of **0.898** on the validation dataset using the Decision Trees classification model

➢ **Credit card fraud detection** | *Course Project | Introduction to Machine Learning*   [Apr-May 2021]

- Performed **exploratory analysis** on European credit card transactions dataset to identify critical features of fraud transactions
- Trained **SVM**, **Adaboost**, **Random Forest**, **MLP Classifier** and **Logistic regression** classification models on the data
- Achieved a maximum **F1 score** of **0.9987** on the test dataset using the MLP Classifier model

➢ **Mopster: A novel design for floor mop** |*Course Project| Theory of Machines and Machine Design*   [Mar-Apr 2021]

- Teamed up in 4 to design a **CAD prototype** of a highly efficient floor mop from scratch using SOLIDWORKS software
- Our mop could potentially **halve the time taken** by regular mops to clean the floor and thus **minimize the effort** required
- Performed **stress analysis**, proved operational reliability and prepared a YouTube video as sales pitch for our mop

➢ **Using ML to predict stock price movements|** *Research Project | Finance Club, IIT Bombay*   [Jun-Jul 2021]

- Collaborated in a team of 4 to study **time series forecasting**, its components and other technical terms related to it
- Deliberated upon the theory and implementation of **AR, ARIMA** and **LSTM** models widely used for time series forecasting

➢ **Modelling iron ore reduction reactor using OpenFOAM** | *Summer Research Project*   [Jun-Jul 2021]

- Studied about the **reactions** involved and the flow of components in the **Midrex** process of direct reduction of iron ore
- Familiarised with the functions in **OpenFOAM**, an open-source **Computational Fluid Dynamics** tool based on **C++**

EXTRA CURRICULARS

- Part of the team that stood **9th** among **100+ teams** in the **RC Plane** Competition organized by Aeromodelling Club, IIT B
- Professionally trained in **squash** for 1 year under the National Sports Organization Program, IIT Bombay
- Secured **4th position** in squash at Freshiesta 2019, the annual sports event for freshmen
- Part of the team that stood **first** in the **intra-hostel cricket tournament** of Hostel 2, IIT Bombay