	Rajat Gupta		170010028
	Aerospace Engineering		**B.Tech.**
	Indian Institute of Technology, Bombay		**Gender: Male**
			DOB: 15-12-1998

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	8.64

Scholastic Achievements

- Secured **All India Rank 277** in **KVPY** and received the prestigious fellowship by **IISc-Bangalore** [*2016*]
- Recipient of the **NTSE** scholarship awarded (1000 students out of 10 lakh) for exceptional **quantitative and aptitude** skills; Also secured **merit** in **SSTSE** with **state rank 15** (conducted by Govt. of Raj.) [*2015*]
- Achieved **99.9 percentile** in **JEE Mains'17** and **99.1 percentile** in **JEE Advanced'17** [*2017*]

Professional Experience

Schneider Electric - *Data Scientist* [*Apr'20 - Jun'20*]
- Designed and developed a **chatbot web application** using **Rasa framework** for **automating** statistical, analytical and FAQ based user queries which will save company's labour by **3-5 full time resources**
- Applied **tensorflow embedding pipeline** for understanding user input and extracting **intent** and **entities**
- Used **dynamic SQL queries** and **pandas** for extracting and analyzing data to produce suitable response
- Developed the **web application** using **Flask** framework, **HTML** and **CSS** to improve user experience
- **Researched** and compared different available proprietary and open source **chatbot frameworks**

NanoSniff Technologies - *Machine Learning Intern* [*Dec'19 - Jan'20*]
- Designed and optimized **neural network** based model to classify substances as **explosives** and **non-explosives**
- Applied **feature engineering** on combustion temperature data to extract more relevant features
- Exploited **K-means algorithm**, **ensemble learning** and **random forest** to improve model accuracy
- Improved model's prediction **accuracy by 15%** achieving test accuracy of **82.3%**

Key Projects

Movie Recommender System *Stanford University* [*Self Project, Jul'19*]
- Designed and optimized a **Movie Recommendation System** using data set comprising of **user ratings** for different movies to **recommend** a set of **most relevant movies** for every user
- Used **Collaborative Filtering Learning Algorithm** with **regularization** to train the model on **octave**

Big Data Analysis - *IMDB Rating of Movies* [*Course Project, May'18*]
- In a **team of 5**, analyzed and depicted an **IMDB rating dataset** of 10000 datapoints using various python libraries like **Matplotlib**, **Numpy**, **Pandas** and **Scipy** to interpret the correlation between time of release, IMDB rating, genre, country of production and commercial success of movies

Interactive website *Johns Hopkins University* [*Self Project, Jul'20*]
- Developed an interactive and **responsive website** using **HTML, CSS, Bootstrap and JavaScript**
- Integrated website to an online server using **ajax** to dynamically get website content without reloading the page

Car Detection using YOLO [*Self Project, Jul'19*]
- Implemented **Real Time Object Detection** using **YOLO** model for application in **autonomous driving**
- Exploited techniques like **non-max suppression** using IoU and thresholding for eliminating overlapping boxes

Chain Reaction Game [*Course Project, Apr'18*]
- Developed a Twin-player Chain Reaction Game on a matrix(9 by 6) using **C++** and displayed the final board

Technical Skills

- **Programming Languages/Frameworks:** Python, C++, JavaScript, SQL, Tensorflow, Pytorch, HTML, CSS
- **Key Courses Undertaken:** Data structures and Algorithms, Foundations of Intelligent and Learning Agents*, Operating Systems, Data Analysis and Interpretation * To be completed by Dec'20
- **Online Courses/Certifications:** Machine Learning | Stanford Univ || Deep Learning Specialization(Deep NN, CNN and RNN) | Deeplearning.ai || HTML, CSS and Javascript for Web Developers | Johns Hopkins Univ

Positions of Responsibility

Core member of Team Zero Waste [*Jan'19 - Present*]
- Working as **project head** under the supervision of TZW aimed towards mitigation of plastic cutlery waste generated in the Institute using a well defined technical approach to replace it with leaf plates
- Spearheaded a **team of 9 members** in organizing **Zero Plastic Waste Half Marathon** in institute

Extra-Curricular Activities

- Served in **NCC** as **cadet** at 2 Mah Eng Regiment | Attended the **Annual Training Camp** [*Oct'17 - Oct'18*]
- **Mentored** a **team of 4** members in fabricating remote controlled aeroplane in RC plane competition [*Oct'19*]
- Organized and managed an event **Awaaz** in Abhyuday's **Annual Social Fest** [*Jan'18*]

Scholastic achievements and extracurricular activities are not verified by the Placement Cell