*Pursuing a **Minor Degree** in the department of **Electrical engineering**, IIT Bombay*

SCHOLASTIC ACHIEVEMENTS

- Recipient of **DRDO Scholarship Scheme Exclusively for Girls-2020** by the **Government of India, Ministry of Defence** provided to **20** undergraduate girls all over India based on JEE Mains score
- Secured a percentile of **99.35** in **JEE Mains** 2020 given by over 10,00,000 candidates from the country
- Achieved an **All India Rank 20** in **KCET-2020** among over **1,75,349** engineering aspirants
- Secured a perfect score **100/100** in Physics, Chemistry, Mathematics and Statistics in class 12 board exam, 2020 and in Mathematics and Social Studies in class 10 CBSE exam,2018 and was ranked first in school
- Achieved an **international rank 92** and zonal rank of **5** in finals of **SOF-National Science Olympiad**,2019
- **State Topper** in **IAPT-National Standard Examination** in Physics among 3495 candidates of Karnataka

INTERNSHIP EXPERIENCE

Software engineer intern | *GoGuardian, California* *(Jun'22-Jul'22)*

- Worked with a team of 3 at the **back-end** to ensure smooth functioning of **math engine** in Edulastic application.
- **Debugged** the code in **Visual studios** and fixed the issues by writing code using **advanced python libraries**
- Learnt Terminal commands,GitHub and Mac basics, Visual studios, serverless, node, npm, aws and package.json.

TECHNICAL PROJECTS

Remote sensing and Visualization | *Summer of code, IITB* *(May-July, 2022)*

- Read research papers to get an insight of **Deep learning** in **aerial imagery semantic segmentation**
- Used **CNNs** to develop a classifier model to detect and identify objects from an image from MBRSC satellites
- **Designed** a **Fully Convolutional Network** of Semantic Segmentation and classification Network

Data Analysis *(May - June, 2021)*

Guide: Prof. Prabhu Ramachandran and Prof. Amuthan A. Ramabathiran *Course Project*

- **Collected data** of 100 RCB matches in IPL to statistically know if the win of RCB in a match is determined by the scores of AB de Villiers and Virat Kohli summed up together, along with a team of 5 and made a report
- Used Python libraries (like **Pandas, Numpy, matplotlib and Scipy Stats**) to perform the analysis
- Used **Virtual graphs** and plotted various statistics and did hypothesis testing and tested linear regression

E-mail spam classification | *Winter in data science, IITB* *(Dec'21)*

- **Used Python libraries** like os, numpy, regex and many more to classify emails as spam or ham in google colab
- Downloaded data and compressed email files using os library, then extracted the email and **created the dataset**
- **Pre processed the data** removing email header and some parts of the body using regular expressions

Graph Theory | *Summer of science, IITB* *(May'22-Jul'22)*

- Studied various topics under graph theory from book **Introduction to Graph theory** by **Douglas B. West**
- Made a Report of the study under guidance of mentor and a video presentation on **algorithms and application**

Design Engineer | *Aerodynamics and manufacturing, Rakshak* *(Aug, 2021- present)*

- Studied about **Preliminary aircraft design, tail and wing design** and learnt basics of **Xfl5**
- Working on a project for upcoming **AUVSI** a competition designed to foster interest in Unmanned Aerial Systems (UAS), stimulate interest in UAS technologies and careers, and to engage students in a challenging mission

Learning Project | ***Under Prof. R K Pant*** *(Dec'21)*

- Studied about the **landing of A340 in Antarctica** that was recently accomplished on November 2nd and the methods implemented to overcome the difficulties to land on ice and amendments that were made to the aircraft
- Made a report on **folding wingtips of Boeing 777x** and studied its advantages and disadvantages
- Learnt about **planning and designing of airports** from book authored by Robert Horonjeff, William Sproule

Mini Project | ***Student Satellite Project, IITB*** *(May, 2021)*

- Designed an **integration sequence** for a satellite structure and design a **transportation box** for the satellite
- Analysed different parts of transportation box and formed the optimum integration sequence of the same
- Created the **motion study** of this sequence in SolidWorks and made a presentation of the report

Cantilever beam deformation analysis *(Nov, 2021)*

Guide: Prof. Krishnendu Haldar *Course Project*

- Analysed and solved a **Boundary Value Problem** of a **cantilever composite beam**, of hollow rectangular cross section with three layers upon addition of load, subjected to compression using **FEM Software**
- Visualized the deformation of the body, and the equivalent and component stress and strain values using **Ansys**
- Analysed the solution, reasoned the region of extreme deformity and verified it with the theoretical solution

POSITION OF RESPONSIBILITY

Department academic mentor | ***Student Mentorship Program, IIT Bombay*** *(May'22- present)*

- Selected among 20 students out of 50 applicants based on a rigorous procedure of SoP,peer reviews and interviews
- **Mentoring** 6 sophomore students to aid them cope with their academic, personal and extracurricular endeavours
- Compiling helpful resources, updating mentees of relevant opportunities contributing towards their development

Manager, Events | ***Aerospace Engineering Association, IIT Bombay*** *(Aug'21- Jul'22)*

- **Initiated and effectuated** department wide events like traditional day, sports day and talks by renowned people
- **Ideated and Structured** new online events to increase intra-department interaction on a digital platform
- **Worked with a team** of 12 enthusiastic students to **ensure smooth operation** of the department

Cultural coordinator | ***Kannada Sangha(R.), IIT Bombay*** *(May'22- present)*

- **Organized Kannada Sanje** - an event that aimed to unite all the Kannada students and faculty on campus
- Responsible for **choreography and execution** of cultural program, followed by dinner with Karnataka delicacy

Coordinator | ***Moodindigo, IIT Bombay*** *(Nov'21-Jan'22)*

- **Ideated and Structured** presentation of events in offline mode and ensured its **smooth operation**
- Responsible for end to end ideation of **Dancefest** (dance event including competitions and performances)
- **Judged** Nrityanjali- a classical dance competition where over 50 students took part from all over India

TECHNICAL SKILLS AND WORKSHOPS

Programing Languages Python, C++, LaTeX

Tools and software Visual studios, Solidworks, Auto-Cad, Xflr 5, Jupyter, Ansys

KEY COURSES TAKEN

Computer and Mathematics

Computer Programming and Utilization, Numerical Analysis, Partial Differential Equations, Multi-variable Calculus, Linear Algebra

Aerospace

Introduction to Aerospace Engineering, Thermodynamics and Propulsion, Solid Mechanics, Incompressible Fluid Mechanics, Aircraft Propulsion, Compressible Fluid Mechanics, Structural Mechanics, Spaceflight Mechanics, Aerospace Measurements Laboratory

EXTRA-CURRICULAR ACTIVITIES

- Completed **Junior and Senior exam** in **Bharathanatyam** with **Distinction**, conducted by **KSEEB** (Karnataka Secondary Education Examination Board) after completing 14 years of training
- Learnt **Kathak** for 1 year under NSO IITB
- **Special Mention (4^{th} position)** in Western Solo Dance Competition, Zest 2021,inter-college fest of **IIIT Hydrabad** *(2021)*
- **Finalist** in Solo Dance Competition, inter-college fest of **IIM Bangalore** and **IIT Indore** *(2021)*
- 2^{nd} **position** in **Solo Dance, Freshiezza** organized by **IITB Dance club, Insync**, out of 100 freshmen participated *(2020)*