Saurabh Singh | **160010044**
Aerospace Engineering | **B.Tech.**
Indian Institute of Technology Bombay | **Male**
DOB: 27-09-1998
Email Id: isaurabh2709@gmail.com

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	5.69
Intermediate/+2	UP Board	RAFI AHMAD QUIDWAI INTER COLLEGE HARDOI	2015	85.60
Matriculation	UP Board	S S S S NIKTAN H S S NANAK GANJ HARDOI	2013	86.50

SCHOLASTIC ACHIEVEMENTS

Secured a Category **all India rank of 45** in JEE Advanced. *'16*

TECHNICAL PROJECTS

Analyze the IMDB dataset of the movies: *Mar'16 -Apr'16*

Data Analysis and Interpretation | Course Project | Prof. Prabhu Ramachandran

- Analyzed data of multiple movies through the ages.
- A simple analysis on the number of releases, average budget, collection, popularity, average duration, profit % over the years using **Ipython Notebook**.
- Plotted the graph for the given data using **Python Pandas package**.

Space Mission Design: *Mar'18 -Apr'18*

Spaceflight Mechanics | Course Project | Prof. Ashok Joshi

- Gathered information regarding the space mission objectives, orbital / trajectory parameters and launch vehicle.
- Described the overall mission and its status, including successes and failures for completed / ongoing missions.
- Analyzed velocity, altitude, burnout angle, mass (empty, payload) for various stages by performing calculations on Ipython Notebook.

Flow Simulation over Rankine half oval: *Oct'18 -Nov'18*

Incompressible Fluid Mechanics | Course Project | Prof. Aniruddha Sinha

- Computed and plotted streamlines for the Rankine Half Oval using MATLAB.
- Programmed these equations under constant source strength and constant free stream velocity to obtain plot for the same.

Develop Generic Math Tools: *Jan'19 -Apr'19*

Engineering Design Optimization | Course Project | Prof. Gopal R. Shevare

- Developed MATLAB code for various mathematical tools like Newton, Bi-section, Brent's, Golden search, Fibonacci methods.

ONLINE COURCES

Machine Learning | Stanford | Coursera | Instructor Andrew Ng *Feb'20*

Supervised Learning – Linear, Logistic Regression, Regularization, Neural Network, SVM
Unsupervised Learning – K-Means Algorithm, Dimensionally Reduction
Anomaly Detection, Recommended System

Data Science Specialization | IBM | Coursera *Mar'20-July'20*

- Course 1: What is Data Science?
- Course 2: Open Source tools for Data Science
- Course 3: Data Science Methodology
- Course 4: Python for Data Science and AI
- Course 5: Databases and SQL for Data Science
- Course 6: Data Analysis with Python

- Course 7: Data Visualization with Python
- Course 8: Machine Learning with Python
- Course 9: Applied Data Science Capstone

Android App Development using Kotlin | Udemy | Instructor Tim Buchalka *Jul'20*

Java Programming | Microsoft | edX *Apr'20*

- Course 1: Learn to program in Java
  Datatype, Scanner, Loops, Methods, Recursion
- Course 2: Object Oriented programming in Java
  Array, ArrayList, Object, Encapsulation, Inheritance, Polymorphism, Abstract, Interface class

Git | Atlassian | Coursera *Mar'20*
Commit, Git Graph, Branches, Merging, Fetch, Push, Pull, Merge Conflict, Rebasing, Pull Request

Python Programming | University of Michigan | Coursera *Apr'20 - Present*

TECHNICAL SKILLS

Programming	C++, Python, Java, Kotlin
Software & Tools	Android Studio, Solid-Works, Git, AutoCAD, MATLAB, Tableau, OpenVSP, Solid-Works, LATEX, MS Office,
Web Development	HTML5, CSS, PHP, SQL, SQLite

KEY COURSES UNDERTAKEN

Course- Calculus, Linear Algebra, Differential Equations, Introduction to C++

FIELDS OF INTEREST

Data Science, Android App Development, Machine Learning, Web Development, Database Development

EXTRA-CURRICULAR ACTIVITIES

- Completed learning of Guitar under **National Sports Organization**, IIT Bombay.
- Table Tennis enthusiast