



**Saurabh Singh**  
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**Indian Institute of Technology Bombay**

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**160010044**  
**B.Tech.**  
**Male**  
**DOB: 27-09-1998**

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.

**Human Factor:** Jan'20 -Apr'20

Course Project | Prof. Vivek Kant

- Gathered Information regarding all the air section accident e.g. civil, military, Personal in India.
- Plotted the interactive graphs using the tableau software.

### ONLINE COURSES

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

Supervised Learning – Linear, Logistic Regression, Regularization, Neural Network, SVM

Unsupervised Learning – K-Means Algorithm, Dimensionally Reduction

Anomaly Detection, Recommended System

**Git** | Atlassian | Coursera Mar'20

Commit, Git Graph, Branches, Merging, Fetch, Push, Pull, Merge Conflict, Rebasing, Pull Request

**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

**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

**Android App Development using Kotlin | Udemy | Tim Buchalka***May'20 -Jul'20***Python Programming | University of Michigan | Coursera***Apr'20 – Present***Web Development Specialization | University of Michigan | Coursera***July'20*

- Course 1: Introduction to HTML5
- Course 2: Introduction to CSS3
- Course 3: Interactivity with JavaScript
- Course 4: Advanced Styling with Responsive Design
- Course 5: Web Design for Everyone Capstone

**TECHNICAL SKILLS**

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<b>Programming</b>	C++, Python, Java, Kotlin
<b>Software &amp; Tools</b>	Android Studio, Solid-Works, Git, AutoCAD, MATLAB, Tableau, OpenVSP, Solid-Works, LATEX, MS Office,
<b>Web Development</b>	HTML5, CSS3, PHP, SQL, JavaScript

**KEY COURSES UNDERTAKEN**

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

**FIELDS OF INTEREST**

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

**EXTRA-CURRICULAR ACTIVITIES**

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