



## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	M.TECH Dual Degree 5Y	IIT Kharagpur	8.05 / 10
2020	Class XII, CBSE	Kendriya Vidyalaya No. 03, B.S.City	94%
2018	Class X, CBSE	Kendriya Vidyalaya No. 03, B.S.City	94.6%

## PROJECTS

- Library-Management System | Under the mentorship of Prof. Pawan Kumar** [May 2023 - Jul 2023]
- Created database management system to handle library processes in efficient and reliable manner using Structured Query Language (SQL)
  - Unleashed the power of **Normalization** to streamline **complexity**, elevate database performance, and eliminate **data redundancy**
  - Integrated functionality to **effortlessly retrieve** real-time information on book availability and allocation across multiple library branches
  - Maximized **query performance** through advanced techniques such as **stored procedures, precompiled routines** & assigned IDs to elevate database efficiency([https://github.com/rjdep/Library\\_Management\\_System](https://github.com/rjdep/Library_Management_System))
- Searching and Sorting Visualizer | Self Project** [May 2022- Jun 2022]
- Pioneered the development of a visualizer that unveils the intricate principles underlying diverse **pathfinding** and **sorting** algorithms
  - Crafted an intuitive interface using **pygame**, capturing user inputs through keyboard & mouse interactions, while delivering visual experience
  - Supports renowned pathfinding algorithms like **A-star**, Breadth-First Search (**BFS**), and Depth-First Search (**DFS**)
  - Embraces a diverse array of sorting algorithms, including **Bubble Sort**, **Insertion Sort**, and **Merge Sort**, enabling users to navigate the realms of optimization and discovery (<https://github.com/rjdep/Searching-and-Sorting-Visualizer>)

## COMPETITION/CONFERENCE

- Codeforces:**
- Achieved a Global Rank of **164** in competitive Codeforces Round #863, outperforming over **17,000** participants [Apr 2023]
  - Achieved a Global Rank of **743** in competitive Codeforces Educational Round #150, outperforming over **20,000** participants [Jun 2023]
- Codechef:**
- Achieved a Global Rank of **126** in competitive Codechef August Lunchtime 2022, outperforming over **20,000** participants [Aug 2022]
  - Achieved a Global Rank of **91** in competitive Codechef Starters 65 organized by IIIT Pune, outperforming **18,000+** participants [Nov 2022]
- Leetcode:**
- Achieved a Global Rank of **127** in the competitive Leetcode Biweekly Contest 100, outperforming over **20,000** participants [Mar 2023]
  - Achieved a Global Rank of **185** in the competitive Leetcode Weekly Contest 93, outperforming over **17,000** participants [Dec 2022]
- Google Coding Competitions:**
- Achieved a Global Rank of **472** in highly competitive **Google Kickstart '22** Round F, outshining a field of **9,000+** participants [Sep 2022]
  - Achieved a Global Rank of **787** in highly competitive **Google Codejam Farewell Round A**, outperforming **8,500+** participants [Apr 2023]

## AWARDS AND ACHIEVEMENTS

- Achieved a Peak Rating of **1668** on Codeforces, crossing the threshold to attain the prestigious title of **Expert** [ID: **Crompton\_15Dec**]
- Attained a Peak Rating of **1972** on Codechef, solidifying a well-deserved position as a **4-star** coder [ID: **crompton**]
- Attained a Peak Rating of **2163** and proudly earned the coveted **Knight** badge on Leetcode [ID: **rajdeep\_maji**]
- Recognized for academic excellence and awarded the prestigious **MCM** (Merit cum Means Scholarship) during the sophomore year

## SKILLS AND EXPERTISE

**Programming Languages:** C | C++ | Python | HTML | CSS | JavaScript\*  
**Libraries and Frameworks:** C++ STL | Matplotlib\* | Numpy\* | Pandas\*  
**Tools:** VS Code | Git | Github | Matlab | LTSpice | HFSS\* (\* elementary proficiency)

## COURSEWORK INFORMATION

- Computer Science:** Programming and Data Structures | Programming and Data Structures Laboratory | Algorithms | Computer Architecture
- Mathematics:** Probability and Statistics | Linear Algebra | Matrix Algebra | Mathematics I & II | Calculus I & II
- Electronics:** Digital Electronics | Digital Signal Processing | Communication I & II | Network Theory | Signals and Systems

## POSITIONS OF RESPONSIBILITY

- Junior Executive Member | Gopali Youth Welfare Society** [Jan 2021- Sept 2021]
- A Non-Governmental Organization run by team of students in association with the professors of IIT Kharagpur
  - Organized a series of **weekly workshops** for teachers, explaining essential skills for effective online teaching during the times of pandemic
  - Served as **content writer** for the vibrant social media handles of a society with a remarkable following of **20,000+** individuals on Facebook
  - Orchestrated a **three-day challenge** event that garnered overwhelming participation, with **1000+** individuals joining the exhilarating journey

## EXTRA CURRICULAR ACTIVITIES

- Dedicated service as a cadet in **3 Bengal Tech AIR SQN NCC** (National Cadet Corps), at IIT Kharagpur over two years
- Member of **Volleyball Team**, Patel Hall of Residence in Inter Hall General Championship 2021-22 at IIT Kharagpur
- Member of **English Elocution Team**, Patel Hall of Residence in Inter Hall General Championship 2021-22 at IIT Kharagpur
- Excelling as Subject-Matter Expert (**SME**) in Adv. Mathematics at **Chegg Inc.**, leveraging knowledge to assist students for past two years