



<b>Examination</b>	<b>University</b>	<b>Institute</b>	<b>Year</b>	<b>CPI / % Credits</b>
Graduation	IIT Bombay	IIT Bombay	2028	9.24 Core: 66   Total: 66
Intermediate	CBSE	DAV Pub School Patna	2024	96.40%
Matriculation	CBSE	DAV Pub School Patna	2022	93.80%

Pursuing a minor degree in **Artificial Intelligence and Data Science** under C-MInDS Department at IIT Bombay

## SCHOLASTIC ACHIEVEMENTS

- Achieved **AA/AB grade** in **10 courses**, awarded to **top 10%** students for exceptional academic performance [25]
- Ranked in the top **2.45%** among over **0.18 million+** candidates nationwide in the JEE Advanced examination [24]
- Secured an overall percentile of **99.76** in IIT-JEE Mains, attempted by **1.4 million+** candidates nationwide [24]
- Scored a perfect **100/100** in **Class XII CBSE Chemistry boards**, demonstrating exceptional proficiency [24]

## KEY PROJECTS

### On-Chain Crowdfunding Platform | Seasons of Code 2025

(May '25 - Jul '25)

Web and Coding Club | Institute Technical Council | IIT Bombay

- Developed and launched a **Solidity smart contract** enabling fully secure, transparent decentralized crowdfunding
- Engineered an **on-chain protocol** using **Remix IDE** for pledging, refunding and withdrawal, ensuring robustness
- Deployed the contract to an **Ethereum testnet**, actively validating transactions and monitoring campaign states
- Gained hands-on experience in **blockchain architecture**, smart contract lifecycle and core principles of **DApps**

### Artificial Intelligence and Machine Learning | Summer of Science 2025

(May '25 - Jul '25)

Maths and Physics Club | Institute Technical Council | IIT Bombay

- Performed **EDA** on wine quality dataset using summary stats, missing checks, histograms, boxplots and correlations
- Assessed models with **MSE, R², Accuracy, Precision, Recall, F1**, achieving up to **90% accuracy** on predictions
- Built and trained **machine learning models** like Linear Regression, Random Forest, SVR and Gradient Boosting
- Applied **data preprocessing** techniques including outlier removal and scaling via standardization/normalization

### Decentralized Voting System - Blockchain | Self Project

(May '25 - Jun '25)

Immutable and Transparent Decision-Making System for DAOs

- Developed a **Solidity smart contract** enabling users to easily create and manage proposals with multiple options
- Implemented secure **on-chain voting**, preventing double voting and accurately tracking votes in real-time for users
- Designed robust **winner determination** with tie-handling after the proposal deadlines for fully transparent results
- Utilized **Remix IDE** for deployment, rigorous testing and learning blockchain governance and decentralized systems

### Non-Fungible Token Marketplace | Self Project

(Jul '25 - Aug '25)

ERC-721 Standard for Digital Ownership

- Developed a fully decentralized **NFT** trading marketplace using Solidity smart contracts on the Ethereum blockchain
- Implemented secure functionalities to **mint, list, buy and track NFTs** seamlessly in real-time on applications
- Leveraged **OpenZeppelin ERC721** standards with **ReentrancyGuard** for security and ownership management
- Tested, debugged, and deployed the smart contract using Remix IDE with **JavaScript VM** and Ethereum testnets

### J.A.R.V.I.S - Just A Rather Very Intelligent System | Self Project

(Dec '24 - Jan '25)

- Successfully automated personal digital tasks using an **AI-powered** system capable of accurate text understanding
- Developed an **NLP**-based command classifier and feature extraction pipeline for high-accuracy intent recognition
- Trained a **machine learning model** to categorize the inputs: **send email, create list, set reminder** and more
- Engineered a **command-line interface (CLI)** for interactive testing, efficient debugging and system deployment

### Spotify Churn Dashboard - Data Visualization | Self Project

(Aug '25 - Sep '25)

- Built an **interactive Streamlit dashboard** to analyze churn patterns for **8,000+** Spotify users across demographics
- Engineered **dynamic filters and metrics** for effectively exploring churn by country, gender and subscription type
- Designed **visualizations and plots** such as bar charts and scatter plots clearly showing churn behavior patterns
- Performed data cleaning and preprocessing using **pandas, NumPy and Seaborn** for accurate churn analytics

## POSITIONS OF RESPONSIBILITY

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### Teaching Assistant (CH111) | IIT Bombay

Chemistry - Prof. Shobhna Kapoor

(Sep '25 - Present)

- Selected as **Teaching Assistant**, a role open only to students with an **AA grade** in CH111 and **CPI above 9.0**
- Mentoring a batch of **40** students in CH111 through interactive lectures and tutorials to strengthen understanding and problem-solving skills in key topics like **Schrödinger wave equation, quantum mechanics principles** etc
- **Organizing assignments and records**, while supporting students in enhancing analytical skills and confidence

## OTHER PROJECTS

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### Wi-Fi Controlled Functional Drone | Course Project

(Jan '25 - Apr '25)

Guide: Prof Joseph John, Prof PC Pandey | Course: Makerspace | IIT Bombay

- Collaborated in a team of **6** to **design, develop, and test** a fully functional **drone**, from **concept to flight testing**
- Utilized **AutoCAD** for detailed 3D modeling of all drone components and implemented **Arduino** and **ESP** modules, along with other essential technical devices, to program and precisely control the drone's fully autonomous flight
- Identified and resolved technical challenges related to **hardware integration** and **software calibration**, ensuring project milestones were consistently met on time, while demonstrating strong problem-solving and key adaptability

### Business Analysis of an FMCG Company | Course Project

(Oct '24 - Nov '24)

Guide: Prof. Mayank Pareek | Course: SOM101 | IIT Bombay

- Conducted an in-depth **business analysis** of **Nestlé**, encompassing **SWOT** framework, organizational strategies, and both short-term and long-term strategic planning within a team of **10 members**, delivering actionable insights
- Delivered a comprehensive **class presentation** to **150 peers**, summarizing key findings & strategic recommendations

### Gesture controlled WiFi Obstacle Bot | XLR8

(Aug '24)

Electronics and Robotics Club | ITC | IIT Bombay

- Constructed a **Joystick controlled** bot in a team of **4** students to overcome obstacles in the shortest possible time
- Implemented the **Mechanical and Electrical** subsystems of the Joystick controlled bot using **L298N** and **Raspberry Pi Pico W** module and programmed differential steering mechanism in C++ using the **Pico SDK** in Arduino IDE

## TECHNICAL SKILLS

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**Programming** Python, Java, C/C++, HTML, L<sup>A</sup>T<sub>E</sub>X, Git, Solidity , Arduino

**Softwares** GitHub, Fusion360, Fracktory , LaserCAD , Microsoft Excel, easyEDA , MySQL

**AI and ML** NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn, TensorFlow, OpenCV, NLP

**IDE / Notebooks** VS Code, PyCharm, Jupyter Notebook, Google Colab, Remix IDE

## RELEVANT COURSES UNDERTAKEN

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<b>Core</b>	Chemistry, Material and Energy Balances, Chemical Engineering Thermodynamics*, Process Fluid Mechanics*, Colloid and Interfacial Engineering*
<b>Mathematics , Physics and Labs</b>	Calculus, Linear Algebra and Differential Equations, Introduction to Classical and Quantum Physics, Chemistry Lab and Physics Lab
<b>Computer Science</b>	Computer Programming and Utilization, AI and Data Science*, Programming for Data Science*
<b>Miscellaneous</b>	Introduction to Management, Makerspace, Economics*, Introduction to Design, Biology*

\* courses to be completed by December 2025

## EXTRACURRICULAR ACTIVITIES

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- Volunteered diligently for **80+ hours** as part of the **NOCS-01** course under Social Development of the **NSS** (2024)
- Collected, organized, and managed old and used clothes from residential societies, ensuring proper and timely delivery directly to the needy underprivileged people as part of the **NSS** Social Development Team at IIT Bombay
- Conducted structured **interactions and feedback sessions** with assigned mess workers, carefully compiling suggestions to improve welfare, address challenges and enhance overall working conditions through NSS initiatives
- Solved **100+** problems on **LeetCode**, also improving coding skills, logical reasoning and problem-solving ability
- Earned **4,000+ XP** on Coding Ninjas, demonstrating consistent practice and proficiency in programming challenges
- Actively competed in diverse institute-level sports tournaments, including **Institute Turf League** and **Department Table Tennis**, demonstrating strong teamwork, leadership and collaboration in highly competitive settings