

Pursuing a **Minor Degree** in the Department of **System and Control Engineering** at **IIT Bombay**

SCHOLASTIC ACHIEVEMENTS

- Stood in **top 1%** among the **250,000+ candidates** who were eligible for **JEE Advanced 2022** (2022)
- Obtained **99.81** percentile among the **940,000+ candidates** who were eligible for **JEE Mains 2022** (2022)
- Attained a perfect score of **100% in the Physics** section of the JEE Main examination (2022)
- District Topper in Mathematics for CBSE Class 10 with a perfect score of **100** marks. (2019)

KEY PROJECTS

Digitalization of Hospital | (sept 2023 - Present)
Project Guide: Prof Sandeep Mondal

- Led a team in the development of a comprehensive hospital **App and Web** platform enabling seamless access to medical reports for students, enhancing healthcare accessibility and convenience.
- This project involved designing user-friendly interfaces, implementing secure **Data Storage**, and ensuring cross-platform compatibility.
- Designed and developed a doctor **Web** appointment application using **PHP**, streamlining the booking process for patients and improving the management of **Medical appointments**, demonstrating strong PHP programming skills and web development expertise.

Technical General Championship Portal | (June 2023 - August 2023)
Institute Technical Council, IIT Bombay

- A comprehensive hostel Score platform serving more than **10** hostels and accommodating over **1000** students.
- Developed and launched a technical championship portal facilitating fair competition among hostels, where each hostel can accumulate points based on their respective achievements and participation,
- Specialized in **Fronted Development**, utilizing **Danjo** as a backend framework to seamlessly integrate and display data on the user interface, ensuring a responsive and interactive web application.

The NewsPedia | Self Project (May 2023 - July 2023)

- Designed, developed, and launched a comprehensive news website, leveraging a range of technologies and skills to provide users with up-to-date news content and a seamless browsing experience.
- Integrated **APIs** for fetching real-time news data from reputable sources, ensuring that the website always featured the latest headlines and articles.
- Developed a responsive and user-friendly web interface using **React**, ensuring optimal display and performance across various devices and browsers.

Line Follower Bot | Course Project - MakerSpace101 (Jan 2023 - feb 2023)

- Engineered an **Arduino-based line-following robot**, integrating advanced pre-programmed drop-off capabilities for precision navigation and cargo deployment.
- Utilized advanced design and fabrication software tools, leveraging Fusion 360 for intricate 3D modeling and LaserCAD for precision laser cutting designs, resulting in high-quality and precisely crafted projects.
- Successfully optimized the design, resulting in an impressive **30% reduction** in structural weight, while concurrently enhancing load-bearing capabilities to accommodate a maximum payload capacity of 0.3 kg.

OTHER PROJECTS

Data Structures and Algorithms | Research Project

(May 2023 - July 2023)

Summer of Science, Maths and Physics Club IIT Bombay

- Conducted **extensive research** on data structures and algorithms, exploring their concepts and applications
- Compared **time & space complexities** of different algorithms and analyzed their performance in various scenarios
- Explored problem-solving strategies like **divide and conquer**, **greedy algorithms**, and **dynamic programming**

Sales Data Analysis and Prediction | Self Project

(May 2023)

- Analyzed sales data to create **predictive models** for **optimizing business strategies** and **improving efficiency**
- Applied ML and Data Visualization algorithms to forecast future sales using historical patterns and influential factors
- Identified and engineered relevant features from the sales data and applied feature selection methods to eliminate irrelevant or redundant variables, **reducing model complexity** and **improving prediction accuracy**

Hyperparameter Tuning and ML Model Selection | Self Project

(May 2023)

- Deployed a project which analyses a data set and produces a score of different ML models in predicting future data
- Developed automated scripts to streamline hyperparameter tuning, improving efficiency and reducing manual effort
- Studied deeply and used algorithms like **K Fold Cross Validation**, **RandomizedSearchCV**, **GridSearchCV**, and **Precision-Recall Curves** to evaluate and compare the performance of different machine learning models

POSITIONS OF RESPONSIBILITY

Web Convener | Web Team, Insitute Technical Council

(May 2023 - Present)

- Part of a **5-member team** responsible for developing and maintaining websites of ITC's clubs and teams
- Spearheaded the development and launch of a *Technical General Championship portal*, orchestrating cross-functional teams and ensuring seamless **collaboration between designers, developers** to deliver a highly engaging and competitive platform.
- Acted as the representative of ITC in a prominent engagement, addressing and interacting with a diverse audience of 700 freshers, effectively conveying our team role

Events and PR Organiser | E-Cell, IIT Bombay

(September '22 - March '23)

Asia's Largest student-run body for Entrepreneurial Development - Patronage from UNESCO and Startup India

- Representing the institute at multiple **off-campus college events**, showcasing a commitment to entrepreneurship and innovation beyond campus boundaries.
- Demonstrated **strong communication and presentation skills** while representing IIT Bombay at external college events, effectively conveying the institute's commitment to fostering entrepreneurship and nurturing future leaders
- Devised marketing strategies to increase the footfall of E-Summit by **250%** y-o-y onboarding **over 300 startups**

Events and PR Coordinator | Abhuyday, IIT Bombay

(March '23 - Present)

Asia's Largest student-run body for Entrepreneurial Development - Patronage from UNESCO and Startup India

- Played a pivotal role in **event planning and public relations** initiatives for Abhuyday, IIT Bombay, successfully organizing and promoting diverse events, fostering positive relationships with stakeholders
- Orchestrated a heartfelt Independence Day initiative at Abhuyday, IIT Bombay, gathering signatures and messages from the community as a heartfelt gesture to convey gratitude and support to our **Soldiers**.
- Took a leadership role in organizing and managing the **TEDx team** while actively contributing to event planning and public relations initiatives for Abhuyday, IIT Bombay. Successfully organized and promoted diverse events, fostered positive relationships with stakeholders, and ensured seamless communication.

COURSES UNDERTAKEN

Electrical

Analog Electronic |, Digital Circuits | Microelectronic| Power Engineering | Energy System | Probability And Random Process | Control System | Signal Processing

Mathematics

Introduction To calculus | Multivariable Calculus | Differential Equation | Linear Algebra

Miscellaneous

Computer Programming and Utilization | Economics | Quantum Physics, Introduction to Electrical and Electronic Circuits | Introduction To entrepreneurship

TECHNICAL SKILLS

Languages & Skills

C/C++, VHDL , JavaScript, Git, L^AT_EX

Software

Quartus, Autodesk Fusion360 , Arduino IDE, VS Code

Web Technologies

HTML, CSS, Javascript, jQuery, Express, Bootstrap, ReactJS, NodeJs, PHP

Miscellaneous Tools

Git, Github

EXTRACURRICULAR ACTIVITIES

Sports	<ul style="list-style-type: none">Enrolled in the National Cadet Corps (NCC) during the first year at IIT Bombay, actively participating in NCC activities. (June 2023)Top 15 out of 250 in NCC CTC camp, demonstrating leadership and excellence in military training, drills, and discipline. (June 2023)A dedicated fitness enthusiast with a strong passion for maintaining a healthy lifestyle and achieving personal fitness goals through regular gym workouts and physical activities. (Nov 2022 - Present)Successfully trekked Kalsubai Peak, Harishchandra highest peak in Maharashtra (May 2023)
Culturals	<ul style="list-style-type: none">Engaged in NCC fashion walk, contributing to cultural diversity and presentation skills. (May 2023)Actively participated in NCC cultural activities, securing First prize in a Drama competition, showcasing creativity and teamwork. (May 2023)