Pursuing **Honors** in **Metallurgical Engineering and Materials Science** offered by **MEMS**, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Achieved a **99.69** percentile among **1.5+ million** candidates in the *Joint Entrance Examination - Mains*   (2022)
- Among the top **4.8%** amongst the **0.15+ million** candidates in *Joint Entrance Examination - Advanced*   (2022)
- Acquired a certificate of merit for being in top **1%** by scoring 100 in Mathematics in *CBSE Board Examination (2020)*

TECHNICAL PROJECTS

Online Book Store Website | *Full-Stack Development: MERN | Self-Project*   (Jul '24)
Developed a comprehensive book store website using HTML, React.js, Node.js, Express.js, MongoDB, and CSS

- Built user-friendly interface with **React.js** for essential functionalities including user registration, book ordering etc.
- Constructed a backend using **Node.js** and **Express.js** to handle API requests and ensure efficient server-side operations
- Utilized **MongoDB** for efficient data storage and management, providing handling of book inventory and user data
- Developed an **admin panel** to manage books and orders, handle user information and ensure efficient administration

Personal Portfolio | *Front-End Development: HTML, CSS, JS, Bootstrap | Self-Project*   (Jun '24 - Jul '24)
Developed a personal portfolio website with multiple interactive sections to showcase personal projects and experiences

- Integrated **JavaScript** to enable animations and interactive features like project sliders and collapsible blog sections
- Utilized **Bootstrap** framework to enhance and ensure a consistent design and functionality across different browsers
- Created custom **CSS** layouts, styles and media queries to achieve a unique, personalized and **responsive** website design

E-Commerce App | *Full-Stack Development: Flutter, JS, Express.js, MongoDB | SOC, 2024*   (Jun '24)
Developed a full-stack Amazon clone with authentication, product search, secure checkout and an admin panel

- Utilized **Node.js**, **Express**, **MongoDB**, Cloudinary and Provider for robust backend and client-side state management
- Employed middleware and authentication **APIs** using **JWT Token** and **JavaScript** for secure authentication process
- Generated an admin panel feature for efficient product management, order monitoring and earnings analytics with graph

LSTM Based Stock Market Prediction | *WiDS | Analytics Club, IIT Bombay*   (Jan '24)
*Used **TensorFlow** (Python) to build a LSTM based Time Series Forecasting Model for Amazon Stock Price Prediction*

- Pre-processed the data to a balanced one having a **50:50** ratio using window sliding algorithm and removing outliers
- Analyzed, applied and compared different **LSTM Neural-Network** architectures for best possible predictive accuracy
- Hypertuned the parameters to restrict the model to **6.24** MSE and **4.86** MAE on the predicted Amazon stock price

Arduino-based Home Security System | *Course Project | Guide: Prof. Tanushree C.* (Aug '23 - Nov '23)
An home security system based on Arduino, encompassing an automated window alarm and phone alert system

- **Calibrated** and utilized infrared, ultrasonic sensors with the Arduino framework, to detect motion from nearby objects
- Integrated a **SONAR** using Arduino and **Processing** (Java) to display detection of objects within a 10-50cm range
- Connected an alarm system with a buzzer and a **Telegram API** to receive instant alerts upon detecting a human

Line Following Robot | *Course Project | Guide: Prof. Tanmay K. Bhandakkar*   (Nov '22 - Feb '23)
Worked in a team of 6 to develop a line-following robot with Wi-Fi controlled manual mechanical arm

- Executed key stages of line-follower robot development including **project timeline** creation, **CAD** designing of the mechanical arm, robot chassis and completed wiring and Arduino programming to carry out pick up-and-drop mechanism
- Integrated line-following robot with **ESP32** Wi-Fi module, effectively creating a web server to manually control the **servo motors** to guide the mechanical robotic arm towards performing pick up actions when approaching an object
- Enhanced **code optimization** and calibrated sensors for more precise pick-up mechanism and robot path tracing

Non-Technical Projects

InstiApp Product Deck | *ProdCom 2024 | Consult Club, IIT Bombay*   (Jun '24)
Published a product deck for InstiApp (developed by DevCom, IIT Bombay) - an all-in-one app for students at IITB

- Secured **3rd** position out of **40+** participants in the annual **product management** competition held by the Consult Club, IIT Bombay by suggesting ways of enhancing user interaction and traction on Instiapp through new features
- Conducted **primary research**, taking extensive user feedback from students to find major **pain-points** in the InstiApp
- Raised issues in the app such as the lack of academic resources, need for notifications etc. and suggested additional features such as including personal development tools that would potentially improve **user engagement** and retention
- Generated **user personas**, designed **app mock-ups** to effectively deliver the need for suggested changes in the InstiApp

Equity Research Project | *Equity Research Competition | Finance Club, IIT Bombay*   (Aug '23 - Nov '23)
*Researched in a team of 2 to **quantitatively** and **qualitatively** analyse Indigo Airlines for stock price forecasting*

- Evaluated the Indian Aviation Industry to use the **'Bottom Up'** approach to select a stock 'Interglobe Aviation Ltd.'
- Analysed **ratios** (EPS, Quick Ratio, Current Ratio, P/E) and other technical indicators to strategically select a stock within the current market conditions in the aviation industry in India and built a **DCF model** to predict intrinsic value
- Researched Indigo's **business model**, government policies and conducted **SWOT Analysis** to forecast price trend

Pitch Deck: Entrepreneurship Project | *Course Project | Guide: Prof. Anu Narasimhan*   (Jun '23)
*Conducted extensive **market research** and competitive analysis in a team of **5** to evaluate Zostel's unique strengths*

- Dissected Zostel's problem statement, **value proposition**, market segmentation, **industry overview**, revenue and profit streams to carefully determine Zostel's components of growth and future prospects in India and worldwide
- Judged the **key social** and **economic determinants** that led to Zostel's success in the Indian hospitality industry
- Conceptualized and presented a **pitch deck** on Zostel, highlighting all findings, in front of an audience of **150+** students

Positions of Responsibility

Department Academic Mentor | *D-AMP | Student Mentorship Program, IIT Bombay*   (Jun '24 - Present)
*Part of a **29** member team selected from **89** applicants based on a stringent interview and extensive peer review process*

- Mentoring **6** second year students from the MEMS Department on a one-to-one basis on various aspects of their life
- Part of the **Blog** subgroup of the D-AMP council in charge of updating and maintaining the MEMS D-AMP blog with information pertaining to the academic and career needs of **300+** undergraduate students of the MEMS Department

Institute Sports Convener | *IIT Bombay Sports*   (May '23 - May '24)
*Part of a **36** member team selected from more than **200+** candidates to conduct all sporting activities at IIT Bombay*

- Ideated and executed **Freshie La Vista**, the freshmen send-off event at IIT Bombay, catering to about **1300+** freshers
- Conceptualized **General Championship Opening Ceremony** which witnessed **300+** footfall from **10+** hostels
- Revamped the Instagram Page of Cricket Club, IIT Bombay by launching **3** campaigns and increasing outreach by **30%**
- Successfully conducted the first ever **Freshers Cricket League**, a 3-day tournament with **80+** freshman players

Business Coordinator | *Team Rakshak, IIT Bombay*   (May '23 - May '24)
*Collaborating with a team of **50+** students working on **Unmanned Aerial Vehicles** for search and rescue operations*

- Developing strategic **marketing** initiatives to reach sponsors through extensive market research and media avenues
- Facilitating the team for coordinating the design and structure of the pitch desk and cultivating **sponsorship** relationships

Marketing Coordinator | *56th Annual Inter IIT Sports Meet*   (Dec '23)
*India's biggest inter-collegiate Sporting Event | **23** IITs across India | **18k+** attendees*

- Coordinated **30+** events in 6 different sports disciplines for 6 days, engaging 90+ teams of students from 23 IITs
- Secured **3+** sponsorship deals for the Inter IIT Annual Sports Meet by leveraging strategic **email marketing** campaign

Technical Skills

Languages	HTML, CSS, JavaScript, Flutter, Python, C++, MATLAB, LaTeX, Arduino
Frameworks and Tools	Bootstrap, React, MongoDB, Node.js, Express.js, PHP, mySQL, Git, JWT
Softwares and Services	Excel, Power BI, Figma, Adobe Photoshop, ThermoCalc, Autodesk Fusion 360

Extracurriculars

Sports	• Scouted for **Inter IIT Cricket Camp, 2023** consisting of the best **23** cricket players across the Institute • Selected for U12 **Mumbai Cricket Association** Probable Squad out of **500+** participants across Mumbai • Played cricket at district level having represented Navi Mumbai Division in U12-U14 Summer Camps
Misc.	• **Mentored** a team of **3** students with ideation, BMC presentation for EnB Buzz 2023 held by E-Cell, IITB • Successfully completed the **Financial Modelling Bootcamp** by Finance Club, IIT Bombay • Currently mentoring 2 **Grade XII** students for JEE Mains & JEE Advanced year-long preparation