SCHOLASTIC ACHIEVEMENTS

- Secured a **top 3%** rank in the **Joint Entrance Examination Advanced** among 180,000+ candidates *(2024)*
- Achieved **98.89 percentile** in the **Joint Entrance Examination Main** among 14,00,000+ students *(2024)*
- Ranked in the **top 0.65%** in the **TS EAPCET** conducted by **TSCHIE** among 200,000+ students *(2024)*
- Awarded **Silver Medal** for Excellence at the school level in the SOF **National Science Olympiad** *(2019)*

KEY PROJECTS

Blockchain Fundamentals | *Summer of Science* *(May 2025)*
Web and Coding Club IIT Bombay

- Learned **blockchain fundamentals** including **Ethereum**, **smart contracts**, and **decentralized applications**
- Explored **Solidity** to develop and deploy secure, functional **smart contracts** on all test **networks** successfully
- Studied **Web3.js integration** with frontend frameworks to enable effective **interaction** with **smart contracts**
- Gained understanding of **blockchain principles**, **consensus mechanisms**, and **gas optimization** for deployment

Log File Analyzer | *Course Project: Software System Labs* *(Apr 2025)*
Guide: Prof. Kameswari Chebrolu

- Developed a **Python Flask web application** to upload, process, and analyze **server logs** efficiently and securely
- Created dynamic **Matplotlib** and **NumPy visualizations** providing statistics and actionable insights from **logs**
- Built a responsive **backend** to efficiently process large **logs** and deliver interactive, user-friendly **visualizations**
- Implemented secure **data handling**, quick retrieval, and real-time display of all key log metrics very effectively

SAT-Based Puzzle Solver | *Course Project: Logic in Computer Science* *(Aug 2025)*
Guide: Prof. Krishna S

- Encoded **Sudoku rules** into **CNF clauses** and implemented a **Python-based solver** successfully and efficiently
- Implemented **PySAT library** to solve **Sudoku puzzles** and reconstruct **grids** from satisfying assignments
- Encoded **Sokoban game** rules including valid moves, box pushes, walls, and grid boundaries into **CNF formulas**
- Designed **decode functions** to extract solver **assignments** into valid player **moves** and final **game solutions**
- Tested multiple **puzzles** ensuring correctness, efficiency, and robustness of **SAT-based logic** implementation

Verilog and x86 Assembly | *Course Project: Digital Logic and Computer Architecture* *(Aug 2025)*
Guide: Prof. Biswabandan Panda

- Designed and implemented complex **sequential, combinational circuits** in Verilog, culminating in a hardware-level **AES Encryption** module that featured optimized data paths and control logic for robust security applications
- Programmed in **x86 Assembly**, managing registers, memory, program flow and **engineered custom structs**
- Implemented algorithms in x86, including **complex arithmetic**, **polar conversions**, and **Sieve of Eratosthenes**

Twitter DApp | *Self Project* *(Jun 2025)*

- Built a mini **Twitter-like DApp** using **Solidity smart contracts** for secure tweet and profile management
- Integrated **React frontend** along with **Web3.js** and **MetaMask** for seamless, secure blockchain interactions
- Successfully deployed the **frontend** on **Vercel** and thoroughly tested the **smart contract** on **Sepolia Testnet**
- Optimized the **smart contract** to reduce **gas costs** while ensuring secure, efficient, and scalable **operations**

InterHub | *Self Project* *(Jul 2025)*

- Built a **React platform** hosting **528 categorized senior resumes** for quick and easy access by IITB students
- Implemented a dynamic **search** and **filtering** functionality to enhance navigation and discover relevant **resumes**
- Integrated internship preparation **resources** and career guides to create a centralized **student career hub** for all
- Ensured responsive **design** and fast **performance** across all devices for a **seamless**, smooth **user experience**

OTHER PROJECTS

Remote-Controlled Quadcopter | *Course Project: Makerspace* *(Apr 2025)*
Guide: Prof. Joseph John
- Engineered a complete **quad drone prototype** with a **custom joystick**, supporting **40 N load capacity**
- Designed and **optimized** the structure using **Fusion 360** with **3D-printed arms** for lightweight durability
- Conducted **flight tests** and refined **hardware-software integration** for **overall** stability and performance
- Integrated **arduino, gyrometer,** and **wireless Communicator** via **soldering** and calibrated the system

Carbon Foot Print Calculator | *Self Project* *(Aug 2025)*
- Built a full-stack **web application** to calculate, track, and visualize personalized **carbon footprints** effectively
- Designed responsive **React input forms** with interactive **charts** to visualize all user data and insights clearly
- Provided personalized **recommendations** to guide users toward **eco-friendly** and lifestyle changes for **sustainability**
- Implemented **backend APIs** for processing, carbon score computation and **database integration** with **PostgreSQL**

Sudoku Game Web application | *Self Project* *(May 2025)*
- Developed a **Sudoku web game** using **Flask** and **Python** with three difficulty levels and responsive **UI design**
- Implemented real-time **move validation** ensuring accurate **gameplay** and immediate **feedback** for all players
- Supported both **console-based** and **graphical interfaces** for flexible input and interactive **game visualization**

QR Code Generator | *Self Project* *(Sept 2025)*
- Developed an interactive **QR code generator** with **React**, featuring custom **colors, sizes**, and real-time **previews**
- Designed a responsive **UI** with **gradients**, and smooth **animations** thus enhancing overall great **user experience**
- Integrated **JSZip** and **FileSaver** libraries to allow downloading single or multiple QR codes quickly and efficiently

Personal Portfolio | *Self Project* *(May 2025)*
- Developed a **responsive portfolio** showcasing expertise in **web development**, **blockchain** and **frontend design**
- Integrated project highlights with live **demos**, **GitHub repositories**, code, documentation for easy accessibility
- Demonstrated **proficiency** in **React, Flask, Solidity, Python** and full-stack projects through implementations

TECHNICAL SKILLS

Languages	C/C++, Python, Bash, Assembly, Verilog, Make, Arduino, HTML, CSS, Javascript, Solidity, Verilog, MIPS, x86 Assembly
Development	HTML5, CSS, Git
Software	LaTeX, Sed, GitHub, Awk, Fusion360, Fractory, Docker, Figma, LaserCAD
Frame Works	React.js, Web3.js.
Data Science Libs	NumPy, Pandas, MatplotLib.

COURSES UNDERTAKEN

Computer Science	†Computer Programming and Utilisation, Software Systems Lab, Discrete Structures, †Data Structures and Algorithms*, Data Analysis and Interpretation*, Logic for Computer Science*, †Operating Systems**, †Digital Logic Design and Computer Architecture*, Design and Analysis Of Algorithms**, †Artificial Intelligence and Machine Learning**
Mathematics	Calculus, Linear Algebra, Differential Equations, Mathematical Structures for Control*
Others	Economics*, Makerspace, Biology, Chemistry Lab, Physics Lab

†*Course has corresponding lab*   **to be completed by November 2025*   ***to be completed by April 2026*

POSITION OF RESPONSIBILITY

Web Convener | *Sustainability Cell IIT Bombay* *(June 2025 - present)*
- Selected from over 130 **students** after a rigorous **interview process** to contribute towards a **sustainable future**
- Leading **campus-wide sustainability efforts** and managing various **student initiatives** smartly successfully
- Currently developed a **Green Score Calculator website** to promote **eco-conscious living** among the campus

EXTRACURRICULAR ACTIVITIES

- Completed a one-year **Volleyball** course under the **National Sports Organization**, IIT Bombay *(2024-2025)*
- Participated in the **XLR8 Competition** conducted by **Electronics and Robotics Club** IIT Bombay *(2024)*
- Achieved **first** place in **NSO Volleyball Showdown** among participants representing NSO teams *(2025)*
- Served as an **Organizer** for the **Eureka Finals**, Asia's largest business plan competition with **25,000+ entries**, coordinating event logistics and ensuring smooth execution of multiple competition rounds *(2025)*
- Awarded the **Gold Medal** in the All India Colouring Competition for creativity and excellence *(2015 -2016)*
- Participated in **Open to All Styles Martial Arts Championships** by Drunken Martial Arts Academy *(2015)*