DIYA GUPTA | CH23B012 | Indian Institute of Technology Madras

EDUCATION & SCHOLASTIC ACHIEVEMENTS

Qualification	Institute	C.G.P.A. / %	Completion Year
BTech in Chemical Engineering	Indian Institute of Technology Madras	8.33/10	2027*
Class XII (CBSE[1])	Sanskar Public School	93.00%	2023
Class X (CBSE)	St. Paul's School	96.80%	2021

- Achieved Top **3.4%** among **200,000+** candidates in JEE[2] Advanced 2023, demonstrating strong analytical problem-solving skills and mastery
- Secured an AIR[3] of **2881** (Top **0.24%**) out of **12,00,000+** candidates in JEE Mains 2023, demonstrating analytical skills and subject knowledge
- Successfully selected for the prestigious **Kotak Kanya Scholarship**, recognizing outstanding academic excellence and leadership potential

PROFESSIONAL EXPERIENCE

Internships

Python Developer
Upskills Campus
May'25-June'25

*Developed a lightweight **file organizer** to automate categorization of desktop files, improving workspace efficiency*
- Implemented extension-based file classification for **1000+ files** into **7+** organized categories using **os** and **shutil**
- Automated dynamic folder creation and efficient file relocation across **20+** unique and diverse digital file types
- Enhanced user experience through robust **error handling** and comprehensive validation for invalid directory paths

Data Science
CNH[4] Industrial N.V.
April'25-May'25

*Developed a **machine learning** model to accurately **predict tractor purchases** based on **seasonal** and **weather data***
- Preprocessed **1k+** records using one-hot encoding and feature scaling, enabling cleaner input, faster convergence
- Trained & evaluated **3** models (**Logistic Regression, Random Forest, Gradient Boosting**) using **80:20** train-test split
- Evaluated overall model performance using **RMSE[5], R², classification metrics**, and feature importance analysis

PROJECT WORK

ML Project

Movie Recommender

Developed a content-based Movie Recommender using metadata from 5,000+ films, suggesting titles via Streamlit
- Built a content-based Movie Recommender using **TF-IDF[6]** on **5k+** movies, generating **5K+** vectors for comparison
- Computed **cosine** similarity matrix over **25M+** combinations, enabling accurate **top-5** recommendations per input
- Integrated model into responsive **Streamlit** app with **<1s latency**, offering real-time suggestions through a clean UI

DSA Projects

Sudoku Solver

*Built an interactive **Sudoku Solver** using Python, showcasing algorithmic problem-solving with **GUI integration***
- Developed a **9x9** Sudoku interface using **Tkinter GUI[7]**, supporting real-time solving and intuitive input for **80+** cells
- Applied **DFS[8]**-based **backtracking algorithm** achieving consistent solution generation within **~1s** for valid puzzles
- Integrated comprehensive input validation and **robust error** handling to ensure puzzle **correctness** before solving

Cash Flow Minimizer System

*Implemented a Python system to minimize the **financial transactions** among banks using diverse payment methods*
- Reduced the interbank transactions by up to **60%** via **heap**-based matching of net balances using **priority queues**
- Designed a highly user-friendly interface for input of banks and transactions with real-time settlement instructions
- Simulated multi-channel payment methods (SWIFT, RTGS, NEFT, IMPS) to enhance banking network applicability

Web Dev.

Spotify Web Clone

*Built a basic **Spotify** clone using **HTML[9]** and **CSS[10]** to replicate core design elements of a modern streaming platform*
- Created key **UI[11]** components like **navigation bar**, **album cards**, and **playback section** using clean **HTML** structure
- Skillfully styled the interface with modern **CSS**, closely **mimicking Spotify's** aesthetic layouts, icons, and gradients
- Focused on pixel-perfect alignment and clear visual hierarchy to closely mirror a professional music streaming app

POSITIONS OF RESPONSIBILITY

Case Club

Strategist
(April'25-Present)

*Spearheading a **4-tier** team of **20+** members to actively foster problem-solving culture and enhance analytical skills*
- Strategizing **PM[12]101** YouTube series to simplify PM preparation for **5k+** students; targeting **10k+** views via content
- Actively boosting social media presence with reels and updates; aiming for **3x** engagement and **25K+** monthly reach

Associate
(May'24-April'25)

*Worked in a team of **16** to actively promote structured thinking and problem-solving culture across the institute*
- Co-authored the **3rd edition** of IITM **Consulting** and **Product Management** Case Books with cases from top firms
- Successfully conducted Pan-India **business case competition** with Traya, achieving a **4x** increase in participation

Skill Development Cell

Deputy Head
(April'25-Present)

Designed strategies for Bluebook automation, Career Fest logistics, and club collaborations to scale SDC impact
- Proposed **Bluebook automation** for **9000+** students using Forms, validations, and **AI** tools to cut **80%** manual work
- Strategically planned 3-day **Career Fest** with **10+** club tie-ups, targeting **5000+** students via multi-channel outreach

Manager
(May'24-April'25)

*Coordinated, ideated, and executed events for the career growth of **13000+** students and the research scholars*
- Assisted in creating the **SDC Bluebook**, compiling key resume tips and insights from **100+** successful candidates
- Helped organize and fully verify **300+** mock resumes to ensure readiness for internship and placement processes

COURSES & SKILLS

Functions of several variables	Computational Programming & Process Simulation Lab	Computational Techniques
Series and Matrices	Programming, Data Structures and Algorithms	Programming in Python
Principle of Economics	Introduction to Programming in C	Machine Learning Foundations*

Software	MATLAB, Aspen, Jupyter, Canva	Programming Language	Python, C++, C, HTML, CSS, SQL
Miscellaneous	MS Excel, Github, VS Code, ML	Libraries & Frameworks	Pandas, NumPy, Matplotlib, Tkinter

EXTRACURRICULAR ACTIVITIES

Inter IIT 7.0
(Culturals Meet)

- Selected from **150+** applicants to represent IITM in Inter-IIT **Street Play Contingent**, showcasing great acting skills
- Chosen for a lead role from **50+** candidates in a performance before **1000+** students, showcasing stage presence

Culturals

- Won **1st place** twice in **Inter-Hostel Stage Plays**, successfully leading a team and consistently showcasing creativity
- Walked as **model** at IIT Madras **Research Park's** Diwali event, showcasing confidence, stage presence, teamwork
- Served as **solo MUA[13]**, leading and managing the entire team for the **Fashion Contingent** at **Festember**, **NIT Trichy**
- Secured **2nd position** in Ethnic Day dance (Rajasthani folk) among **20+ teams**, performed before **1000+ audience**

Sports

- Captained a 12-member team to **Gold** in **Inter-Hostel Kho-Kho** at **Schroeter**, showcasing leadership and team coordination

Miscellaneous

- Assisted as **TA[14]** for GN6106, actively evaluating assignments and mentoring **12** students to improve performance