

Education

Degree/Certificate	Institute	CGPA/%	Year
M.Tech (Department of Management Sciences)	Indian Institute of Technology Kanpur	-	2026–Present
B.Tech (Biotechnology)	Netaji Subhas University of Technology (NSUT), New Delhi	7.54 CGPA	2019–2023
Higher Secondary Education (CBSE)	Delhi Public School (DPS), Dwarka, New Delhi	83.80%	2018
Secondary Education (CBSE)	DAV Public School, Dwarka, New Delhi	10.0 CGPA	2016

Projects

- [1] Big Mart Sales Prediction ([Github](#))** — Machine Learning — Predictive Analytics **Self Project**
- Built a predictive regression model to forecast store-level sales for individual products across retail outlets using a dataset of 8,523 records spanning 12 features.
 - Conducted extensive EDA, statistical missing value imputation, VIF-based multicollinearity reduction, and engineered high-impact features.
 - Trained Linear Regression, Ridge, Lasso, XGBoost, and Gradient Boosting Regressors; achieved top performance with **Gradient Boosting Regressor** ($R^2 = 0.60$, RMSE = 1038.2).
- [2] Simple Chatbot using NLP ([Github](#))** — Machine Learning — Retrieval-based Chatbot **Self Project**
- Developed a modular chatbot using Logistic Regression and cosine similarity on 3,725 cleaned Q&A pairs vectorized via TF-IDF.
 - Integrated cosine similarity fallback mechanism and utility tools including Wikipedia search, math solver, country info, and date-time services.
 - Implemented threshold-based routing to display response sources alongside prediction confidence scores.

Conference Presentations

- "Effect of chitosan-stabilized iron oxide nanoparticles on Vigna Radiata sprouts"**, Presented at the International Conference on Advanced Materials for Emerging Technologies (ICAMET-2023), Organized by Dept. of Physics, NSUT, New Delhi (May 4–6, 2023).

Coursework & Skills

Relevant Coursework	Probability and Statistics* Operations Research for Management* Introduction to Computing* Data Mining*
Technical Skills	Programming: Python Libraries: NumPy, Pandas, Matplotlib, Scikit-learn* Tools: Tableau, Power BI, MySQL*
Soft Skills	Critical Thinking High Persistence Problem Solving Communication Curiosity Leadership

Scholastic Achievements

- GATE Biotechnology (BT) 2024:** Secured **All India Rank 87 (AIR 87)**.
- GATE Biotechnology (BT) 2023:** Secured **All India Rank 153 (AIR 153)**.

Leadership & Initiatives

- Founder & Lead Educator – [GATE BT Academy](#) (YouTube)** **May 2026 – Present**
 - Founded and scaled a YouTube channel (**575+ subscribers**, **13.6k+ views**) teaching **Engineering Mathematics** and **Aptitude** for GATE BT.
 - Authored curriculum, developed instructional content, and drove organic channel growth within 3 months of launch.