

EDUCATION

Year	Degree	Institute	CPI/%
2022 - Present	B.S. SDS	Indian Institute of Technology Kanpur	8.0/10
2021	Class XII (CBSE)	Jawahar Navodaya Vidhyalaya Bundi Rajasthan	92.8%
2019	Class X (CBSE)	Jawahar Navodaya Vidhyalaya Nagaur Rajasthan	94.8%

SCHOLASTIC ACHIEVEMENTS

- Secured an **All India Rank** of **2064** in the Joint Entrance Examination (**JEE Advanced 2022**) among **2 lakhs** students.
- Secured an **All India Rank** of **5385** in Joint Entrance Examination (**JEE Main 2022**) among **1.2 million** students.
- Awarded an **A* grade** for outstanding and exceptional performance in **ELEMENTARY STOCHASTIC PROCESSES II** course.
- Cleared **Joint Dakshana Selection Test** among top 1 % JNV students from all over India and got free IITJEE coaching.
- Qualified Jawahar Navodaya Vidyalaya selection test** and got free CBSE education from class 6th to 12th.

KEY PROJECTS AND ASSIGNMENT

- Stock Analysis** | *Course Project: MTH208 Data Science Lab I* | *Mentor: Prof. Dootika Vats* | Sep'23 - Nov'23
 - Analyze historical stock prices, assess trends and risks, compare performance, and evaluate the impact of the COVID-19 pandemic and global recession on selected companies' stocks using **rvest**, **ggplot2**, **dplyr**, **shinydashboard**, **Plotly Packages**.
 - Developed a **shiny app in R** to scrape and visualize historical stock data for TCS, JSW Steel, Infosys, HDFC Bank, and BSE from Yahoo Finance, creating an interactive dashboard for performance and **financial metrics** insights.
 - The application allows users to visualize stock price trends, monthly and yearly returns, and key financial indicators.
 - Visualizations included **candlestick and bar charts** for returns, radar charts, and **plotly** for visual analytics.Implemented features to calculate average monthly returns and created a comparative analysis for multiple stocks and benchmarks.
- Analyzing and enhancing the UPI ecosystem** | *Course Project: MTH209* | *Mentor: Prof. Subhajit Dutta* | Jan'24 - Apr'24
 - Developed a data analytics project to analyze month-wise UPI transactions over recent years for the **top 50** beneficiary and remitter banks. The objective was to uncover actionable insights into transaction volumes, trends, and patterns.
 - Applied **Regression analysis** to identify key predictors of transaction volumes, performed **rank analysis** for comparing ranks of the banks, utilized **PCA** for dimensionality reduction, and implemented **k-means clustering** to segment banks based on transaction behaviors. Visualizations included **scree plot, histograms, multiple bar plots, and horizontal line plots**.
 - In linear regression we obtained a **multiple R²(0.61)** and nearly all of predictors are significant at **0.05 level of significance**.
- Predictive Modeling for Kaggle-like Competition** | *Course Assignment: MTH210 Statistical Computing* | Apr'24
 - Developed a predictive model to forecast response variable y using a dataset with **100 predictors**, optimized for minimizing **squared error loss**. Implemented a function for predicting y from new inputs, evaluated against a test dataset.
 - Implemented **ridge regression with cross-validation** to select the optimal regularization parameter, reducing prediction error.
- CodeCraft Summer Project** | *Bio-Soc Project* | May'24 - June'24
 - Utilized C++ for all DSA implementations. Mastered C++ Standard Template Library (**STL**).
 - Explored and implemented various DSA topics such as **recursion, hashing, backtracking, trees, graphs, DP, Trees, and stacks**.

TECHNICAL SKILLS

Languages	Utilities	Libraries
C/C++, R, Python	Git/Github, Rmarkdown, L ^A T _E X	C++ STL, ggplot2, Rshiny, tidyverse, rvest, dplyr, Numpy, Pandas

RELEVANT COURSES

Statistical Computing (B+)	Theory of Statistics	Data Science Lab - 2
Fundamentals of Computing -1 (B+)	Introduction to Probability	Data Structure & Algorithm(B+)
Data Science Lab - 1 (B+)	Introduction to Electronics (B+)	Matrix Algebra and Linear Estimation (A)
Introduction to Machine Learning(A)	Elementary Stochastic Process-1	Elementary Stochastic Process-2 (A*)
Time Series Analysis (A*)	Linear Regression And Anova (B+)	Computer Aided Decision Systems (B+)

POSITION OF RESPONSIBILITY

- Executive Member** | *Stamatics, IIT Kanpur* | Nov'23 - Present
 - Authored problems and judged submissions for Mathemania, a nationwide math competition with 250+ participants.
 - Responsible for organising of Mathematical Competitions, Talks by various Professors and students, Stamatics projects etc.

EXTRA CURRICULAR ACTIVITIES

- Provided **mentoring** to four IITJEE Qualified students for the **JOSSA** counselling process through the **Dakshana Foundation**.
- Participate as Player, Under 17 Category - 29th Regional Boys Kho-Kho Meet (2018-19) held at JNV Baroda.
- NCC Cadet, **'A' Grade** - Completed National Cadet Corps training during school, developing leadership, discipline, and teamwork skills.
- Secure **2nd Place** in Junior Category **Essay Writing Competition** in school demonstrated strong writing skills and critical thinking abilities.
- Successfully participated in and completed the **IIT Gandhinagar Dakshana Leadership Program'22**, a comprehensive program in collaboration with the Dakshana Foundation, which emphasized leadership skills and professional development.
- Participated in **Fresher's INFERNO'23**, representing Hall 5 and achieved the distinction of securing **gold medal** in 400m relay.