

ACADEMIC DETAILS

B Tech (Mechanical Engineering)	2022-2026	MMMUT, Gorakhpur	6.13/10.0 (Ongoing)
Class XII (CBSE)	2021	Little Flower School, Gida, Gorakhpur	82.6%
Class X (CBSE)	2019	Little Flower School, Gida, Gorakhpur	89.66%

PROJECTS

Library Management System || [Code](#)

Python, Django, MySQL

- Developed a library management system with features for book management, user registration, and transaction tracking.
- Implemented role-based access (Admin, Librarian, Member) and secure login functionality.
- Integrated MySQL for storing and managing book, user, and transaction data efficiently.
- Generated reports on book usage, overdue items, and member activity to support library operations.

Numerical Methods Solver || [Code](#)

C++, VS Code

- Implemented various numerical methods (Bisection, Newton-Raphson, Secant, Gauss-Seidel) to solve nonlinear and linear equations.
- Developed algorithms to solve first-order ordinary differential equations using Euler’s and Runge-Kutta methods.
- Focused on numerical integration techniques like Simpson’s Rule and the Trapezoidal Rule for accurate area calculations.
- Conducted error analysis and convergence checks to ensure the accuracy and reliability of solutions.
- Optimized the efficiency of iterative methods for better computational performance and faster results.

House Price Prediction || [Code](#)

Machine Learning, Python, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, VS Code

- Developed a machine learning model to predict house prices based on features like location, size, and amenities.
- Preprocessed and cleaned the dataset to handle missing values, outliers, and normalize features.
- Implemented multiple regression algorithms (e.g., Linear Regression, Decision Trees) to compare and optimize prediction accuracy.
- Evaluated model performance using metrics like Mean Squared Error (MSE) and R-squared, improving prediction accuracy through hyperparameter tuning.

ACHIEVEMENTS

- Bronze-Badge in Code Chef** – Recognized for strong problem-solving skills and proficiency in competitive programming. Demonstrates my ability to tackle complex algorithmic challenges efficiently.

SKILLS

Technical:

Programming: C/C++, Python, Django, Html, CSS, MySQL

Software & Tools: Microsoft Office, AutoCAD Designing

Curriculum: Software Development, Backend Development, Machine Learning, Data Science, Data Analysis, and Engineering Design & Simulation (AutoCAD, Structural Integrity, Product Lifecycle Management)..

Certificates: Joining Technologies for Metals | IIT Roorkee(NPTEL).

Interests:

- Software Development, Backend Development, Machine Learning, Data Science, Data Analysis, Web Development.
- Database Management, Automation, AI & Predictive Modeling, System Optimization, Engineering Design & Simulation, CAD Modeling.
- Structural Integrity, Product Lifecycle Management, and Smart Technologies.Mechanical Design, Simulation, Manufacturing Processes.

POSITION OF RESPONSIBILITY

- Project Leader, Library Management System** – Led a team in designing and developing a Library Management System. Oversaw database design, user interface development, and feature implementation to streamline book management and user transactions.

EXTRACURRICULAR

- Legal Studies Enthusiast** – Studied intellectual property, contract law, and technology regulations to understand legal aspects of engineering and innovation.

- **Cricket Enthusiast** – Actively follow and analyze cricket matches, player performances, and game strategies.