

ROLI RATHOUR

 Roli368

 LinkedIn Profile



roli.20249024@mnnit.ac.in



Portfolio

Education

Motilal Nehru National Institute of Technology Allahabad, Prayagraj	8.35	2024-Present
<i>B.Tech , Materials Engineering</i>		2028
Jawahar Navodaya Vidyalaya	Percentage:	90.4
<i>CBSE,Lakhimpur-Kheri, UP</i>		2023
Jawahar Navodaya Vidyalaya	Percentage:	94.6
<i>CBSE,Lakhimpur-Kheri, UP</i>		2021

Technical Skills

Programming Languages: Python, C++, JavaScript

Machine Learning: Supervised Learning, Regression, Classification, Feature Engineering, Model Evaluation

Deep Learning & NLP: CNN (Basics), Text Preprocessing, TF-IDF

Libraries: NumPy, Pandas, Matplotlib, Seaborn, Plotly, Scikit-learn, joblib

Frameworks: Flask, React.js, Express.js, Next.js, Tailwind CSS

Databases: SQL, MongoDB

Developer Tools: VS Code, Anaconda, Git, GitHub, Google Colab

Data Visualization: Power BI

Deployment & DevOps: Docker, MongoDB Atlas, GitHub Pages

PROJECTS

Smart India Hackathon – Disaster Management Platform	 GitHub	Sep-Dec,2025
• Built an IoT-based early warning system to predict water quality and water-borne disease risks using environmental and healthcare data.		
• Developed machine learning models for hotspot prediction and created dashboards for data visualization.		
• Implemented automated email alert mechanisms for high-risk zones.		
• Secured 3rd position in the Internal Smart India Hackathon.		
• Tech Stack: Node.js, Express.js, MongoDB, REST APIs, Flask, Pandas, NumPy, scikit-learn, Matplotlib,Joblib		
Smart Waste Segregation & Recycling System	 GitHub	Nov,2025
• Developed an IoT-based smart waste segregation system to automatically classify waste into metal, wet, and dry.		
• Integrated sensor data with machine learning logic and GPS tracking to enable location-based monitoring and optimized waste collection.		
• Proposed a QR-based incentive system to encourage proper waste disposal and improve transparency.		
• Tech Stack: Node.js, Express.js, MongoDB, REST APIs, Flask, Pandas, NumPy, scikit-learn, Matplotlib, GPS, Hardware		
Anant Yatra – Car Booking Web Application	 GitHub Live Demo	Dec-Jan 2025
• Developed a car booking platform with real-time distance calculation and fare estimation using OpenStreetMap and OSRM.		
• Implemented interactive UI components including booking forms, image sliders, driver profile, and customer reviews.		
• Tech Stack: React.js, Tailwind CSS, OpenStreetMap, OSRM, Vercel		

Positions of Responsibility

• Campus Ambassador, GirlScript Summer of Code 2025 (GSSoC'25)	Jun 2025 – Aug 2025
• Media Team Member, Robotics Club, MNNIT Allahabad	Feb 2025 – Dec 2025
• Content Team Member, E-Cell, MNNIT Allahabad	Feb 2025 – Present

Achievements

- Secured **3rd Position** in the Internal Smart India Hackathon (**SIH**) **2025**.
- Secured **3rd Position** in **Viral Vision** event on the **Unstop** platform, conducted by **MNNIT Allahabad** (2024).