



# Vandita Gupta

Roll No: B23CM1061

Artificial Intelligence and Data Science

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GitHub

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## EDUCATION

**Indian Institute of Technology Jodhpur**

Jodhpur, Rajasthan

*B.Tech in Artificial Intelligence and Data Science : CGPA 8.59*

2023 - 2027

**Uttam School**

Delhi NCR

*Class XII (2023) : 96.8% , Class X (2021) : 99.4%*

## EXPERIENCE

**AI/ML Intern at GeeksforGeeks**

Jan 2025 – Current

*Machine Learning, Deep Learning, Data Science, Technical Writing, Algorithmic Analysis*

*Noida, NCR*

- Optimized complex ML pipelines using **scikit-learn**, **PyTorch**, and **TensorFlow**; enhanced model accuracy and generalization across diverse datasets.
- Published **100+ AI articles** (CNNs, Transformers, NLP) with **100K+ reads** and high engagement.
- Benchmarked **8+ ML models** on **F1-score**, **AUC**, **latency** to evaluate use-case efficiency.

## PROJECTS

**ISRO: High-Resolution Elemental Mapping on Lunar Surface**

Oct 2024 – Dec 2024

*Report Link — Python, MySQL, Neo4j, Power BI, Machine Learning Models*

*ISRO*

- Developed a **real-time lunar data pipeline** for the **Indian Space Research Organisation (ISRO)** using **gridding**, **interpolation**, and **deterministic Kriging** to address spatial gaps.
- Extracted **elemental ratios** from **XRF spectral data** and identified **probable water sites**, **volcanic regions**, **ISRU sites**, and **impact features**.
- Replaced **CSV workflows** with **MySQL**, enabling **faster ingestion** and **sub-8-second heatmap updates**.
- Compiled a **report** with **statistical graphs**, **elemental maps**, and **data pipelines**.

**NeuroLearn: Graph-based Context Aware Course Recommendation Engine**

Jan '25 – May '25

*Python, FastAPI, React.js, Next.js, Neo4j, PostgreSQL, NLP, Machine Learning*

*IIT Jodhpur*

- Developed a Course recommendation system using **collaborative filtering**, **matrix factorization**, and **transformer-based sentiment models** to suggest optimized learning paths based on user behavior & feedback.
- Integrated **Neo4j** & **FastAPI** to enable **real-time**, **scalable** recommendations via a **React.js** interface.

**Smart Money: Smart Financial Tracking and Engagement Platform**

Jul '24 – Aug '24

*Website Link — React.js, Node.js, Express.js, MongoDB, Firebase, JWS, Gemini API, Media APIs*

*IIT Jodhpur*

- Built a platform to track **real-time transactions** and calculate **financial health scores** using the **Gemini API**, helping users better understand and manage their spending habits.
- Secured backend with **JWT login**, **Firebase user flow** & organized data pipelines for high performance.
- Automated content scheduling** to **Instagram/YouTube** with dashboard for engagement & finance insights.

**AI Research Paper Evaluation and Recommendation System**

Jan '25

*Report Link — Python, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, NLP, Pathway Framework*

*IIT KGP*

- Achieved **98% accuracy** at **IIT Kharagpur Data Science Hackathon 2025** by applying **NLP** and **data analysis** to classify research papers as "Publishable" or not.
- Built a **recommendation system** to suggest conferences with justification using the **Pathway Framework**.

## TECHNICAL SKILLS

**Languages:** Python, C/C++, JavaScript, SQL, NoSQL, Cypher(Neo4j)

**Tools:** AWS, Scikit-Learn, Numpy, Matplotlib, Scipy, Pytorch, PowerBi, OpenCV

## INVOLVEMENTS AND ACHIEVEMENTS

**Top 5% (A/A-):** Data Structures and Algorithms (**DSA**); Machine Learning (**AI&ML**); Maths for Computing; **Probability**, Statistics and Stochastic Processes (**PSSP**).

**Bronze medal** in Inter-IIT Tech Meet 13.O at IIT Bombay in problem statement by **ISRO**.

**Quarter Finalists** in badminton at 56th Inter IIT Sports at IIT Bombay

**Assistant Head**, Entrepreneurship Cell - IIT Jodhpur; **Executive**, Department of Computer Science - IITJ

**Core Member**, Badminton Society, RAID (AI society) - IIT Jodhpur