Aditya Vardhan

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Education

Degree	Institute	CGPA/Percentage	Year	
B.Tech. Major in Mathematics & Computing	Rajiv Gandhi Institute of Petroleum Technology, Amethi, Uttar Pradesh	8.57 (Current)	2021 - 2025	
B.Tech. Minor in Business Analytics	Rajiv Gandhi Institute of Petroleum Technology, Amethi, Uttar Pradesh	6.00 (Current)	2021 - 2025	
Senior Secondary	Delhi Public School, Bokaro, Jharkhand	89.80%	2020	
Secondary	Loyola Convent School, Ranchi, Jharkhand	94.8%	2018	

Experience

DRDO INTERN

Integrated Test Range, Chandipur   May 2023- July 2023

➔Worked on Position finding of Air-bone object with Dynamic Electro Optics using Triangulation.

Projects

Deep learning solver for solving advection–diffusion equation in comparison to finite difference method.

Rajiv Gandhi Institute Of Petroleum Technology   **January 2023 - Present**

➔For solving the 2D unstable advection-diffusion equation in atmospheric **numerical modeling**, FDM were compared to a **deep learning-based solver.**

➔The accuracy, stability, and interpolation of the deep learning-based solver are superior to those of the **FDM-based approaches**.

➔Emphasizes the **DNN solver's** potential as a substitute for FDM-based solvers in atmospheric **numerical modeling**.

Model to optimize bus routes data of Bengaluru Metropolitan Transport Corporation:

CNI Hackathon Organized by **IISc Bangalore**   **September 2022 - December 2022**

➔ Employed Python and advanced data science methods to examine extensive BMTC bus records, processing over 6 million data points.

➔Conducted rigorous data cleaning, preprocessing, and exploratory analysis, resulting in an optimized model achieving over 80% accuracy despite data noise.

➔ Utilized machine learning techniques including K-means clustering to categorize bus routes based on similar travel patterns, enhancing route management and operational efficiency for BMTC.

Achievements

● Secured a position among **top 11** candidates out of 600 in **CNI hackathon** conducted by **IISc Bangalore**.
● Secured a position among **top 6%** candidates out of 0.25 million students in **Jee, Advanced**
● Booked a place among **top 2%** candidates out of 1.1 million students in **Jee, Mains**

Skills

● **Data Science Skills: Python, NumPy, Pandas, Matplotlib, Scikit-Learn, SQL, Tableau, MongoDB**

● **Machine Learning Skills: TensorFlow, Keras, Supervised Learning, Unsupervised Learning**

● **Mathematics Skills: Probability, Applied Statistics, Linear Algebra, Calculus, Numerical Analysis, Discrete Mathematics, Elementary Number Theory**

● **Soft Skills: Effective Communication, Problem Solving, Time Management, Adaptability**

Involvement

Teaching Volunteer
GyanArpan   **August 2022 - Present**
• Through teaching, I committed my time to empowering underprivileged students.