



PRATYUSH CHANDRA | 21CS2030



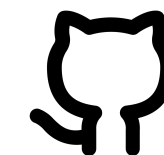
+91-8709957746



[Linkedin](#)



21cs2030@rgipt.ac.in



[Github](#)

EDUCATION

Year	Degree/Board	Institute	CGPA/Percentage
2026	Integrated Dual Degree(B.Tech+M.Tech) in Computer Science Engineering & Artificial Intelligence	Rajiv Gandhi Institute of Petroleum Technology,Jais,Amethi (An Institution of National Importance set up under the Act of Parliament, MoPNG, Government of India)	7.60
2020	Class XII,CBSE	D.A.V. Centenary Public School,Siwan	82.33%
2018	Class X,CBSE	D.A.V. Centenary Public School,Siwan	90.6%

EXPERIENCE/PROJECTS

Inventory Optimization | *Machine Learning,Linear Programming & Computer Optimization Techniques* [Apr'23 - Till date]

- Reduced inventory holding costs by **15%** while maintaining a **98%** fill rate for fluctuating demand by analyzing 24 months of historical sales data to identify seasonality and trends,used **Pandas** for data manipulation and **Scikit-learn** for feature scaling and transformation.
- Developed a machine learning model **ARIMA** achieving an accuracy of **87%** in forecasting future demand.
- Integrated the demand forecast with the model to determine optimal order quantities and reorder points using **CVXPY 1.5 solver**, leading to a significant reduction in stockouts.
- Achieved a **15%** reduction in inventory holding costs, resulting in substantial cost savings and Maintained a **98%** fill rate, ensuring high customer service levels and minimizing stockouts.

Supply Chain Network Design | *Linear Programming* [Feb'24 - Mar'24]

- Designed an efficient supply chain network that minimized **transportation costs** by **12%** and improved **average delivery time** by **1.5 days** and Developed a network model representing suppliers, warehouses, and customers across **5 locations** using **Gephi** tool and python library **NetworkX**.
- Defined decision variables such as the quantity shipped from each supplier to each warehouse and Formulated constraints including:
 - * Capacity limitations at warehouses
 - * Minimum and maximum demand requirements for customers
- Utilized linear programming **CVXPY 1.5 solver** to solve the model and identify the **optimal network configuration** with the **minimum total cost** (transportation + other relevant costs) and Achieved a **12%** reduction in **transportation costs**, leading to significant cost savings for the company.
- Improved **average delivery time** by **1.5 days**, leading to faster customer fulfillment and potentially increased customer satisfaction.
- This project was the semester project for the course Linear Optimization taught by **Dr. Debashish Jena**

AI-Powered Emotional Audio Enhancement | *AI,Deep Learning* [Dec'23 - Feb'24]

- Developed an AI system to infuse emotions like anger, happiness, despair, intrigue, and more, into synthetic audio files using **VAE** and **GAN**. Achieved over **80%** accuracy in user perception tests for identifying intended emotions i.e. effectiveness of the AI system in conveying the intended emotions.
- Utilized machine learning techniques to improve the speech quality of AI-generated audio, resulting in a **20%** reduction in perceived artifacts (e.g., unnatural pauses, robotic voice) compared to pre-enhancement audio.
- This project was the **B.Tech Project** done under the supervision of **Dr. Susham Biswas**.

Combinatorial Polymer Design | *Machine Learning,AI,Deep Learning* [April'23 - Aug'23]

- Developed an AI-powered system for combinatorial polymer design, achieving a **75%** success rate in identifying novel and effective polymer combinations.
- Leveraged a combination of machine learning algorithms, including **Generative Adversarial Networks (GANs)** and **Support Vector Machines (SVMs)**, to analyze fundamental data and discover promising polymer combinations with the potential to outperform existing materials.
- Predicted the properties (e.g., strength, conductivity, biodegradability) of these novel polymers using **regression models**, enabling the prioritization of candidates for further investigation and reducing the need for costly and time-consuming industrial trials by an estimated **30%**.

SKILLS AND EXPERTISE

- Programming Languages** : Python, C/C++, MATLAB
- Machine Learning and Deep Learning** : TensorFlow, Keras, Scikit-Learn, NLTK
- Data Handling and Management** : SQL, SQLite, MongoDB
- Data Analysis and Visualization** : Numpy, Pandas, Matplotlib, NetworkX, MS Excel, PowerBI, VBA Macros, Google Looker Studio
- DevOps** : GitHub Actions, Docker
- Cloud Computing and Deployment** : AWS

ACADEMIA

AI : Machine Learning | Artificial Intelligence | Data Mining | Deep Learning | Natural Language Processing | Image,Speech,Video Processing | UAV Data Processing.

Computer Science : Data Structure & Algorithms | Design and Analysis of Algorithms | Database Management Systems | Computer Networks | Theory of Computation | Web Technology | Operating Systems | Linear Optimization | Software Engineering | Mobile Computing | Soft Computing .

LEADERSHIP ROLES

Design Head | GeeksforGeeks Student Chapter, RGIPT [Jun'23 - May'24]

- Led over 15 creative workshops on **Graphic Design, UI/UX**, Digital Illustration, and Animation, delivering hands-on learning experiences.
- Provided personalized mentorship and support to more than 100 aspiring designers, fostering their professional development.
- Organized networking events for 200+ students, creating opportunities to connect with industry experts and peers for collaborative growth.

AWARDS AND ACHIEVEMENTS

- Attained a position among the top **12%** of candidates, outperforming **0.14 million** students in the esteemed **JEE Advanced 2021** examination.
- Earned a distinguished placement among the top **15%** of candidates, surpassing **0.89 million** students in the **Joint Entrance Examination Main 2021**.
- Cleared the **GATE 2024 DA(Data Science & Artificial Intelligence)** examination on the first attempt, meeting the category cut-off requirements.

CO-CURRICULAR ACTIVITIES

- Bearer of all the three certificates - First(Pratham) and Second(Dwitiye) Sopan Third(Tritiye) Sopan, **Scout & Guide** Certificates.
- Participated in multiple Brawlhalla and BGMI esports events representing the college, demonstrating gaming proficiency at the collegiate level.