

Mohan Krishna Gupta

Moradabad, Uttar Pradesh, India | [Linkedin](#) | +91 7017191926 | mohankrishnagupta@gmail.com | [Github](#) | [Website](#)

EDUCATION

Moradabad Institute of Technology

Uttar Pradesh, India

B.Tech, Computer Science & Engineering (G.P.A: 8.3/10)

2019 - 2023

- Coursework: Deep Learning, Machine Learning Techniques, Data Structures and Algorithms.

EXPERIENCE

Machine Learning Intern

Remote, India

Jupiter AI Labs

Jun, 2023 - Jul, 2023

- Created document question-answering system using **LangChain** and **Vector databases**.
- Developed **POCs** on **finetuning LLMs** for custom business usecases, **Query-based Data Retrieval**, and **Chatbot** development with **LangChain** and created **Tag-based Searching** using **Spacy's NER**.
- Collected data from various sources using **web scraping** techniques. Worked on pre-processing of textual data and images.
- Developed web applications using **Flask** with **MySQL** database.

AI Developer Intern

Remote, India

Neolen Technologies

Oct, 2022 - Oct, 2022

- Exhibited a working knowledge of **CNN Architectures** and **GANs** to figure out the best approach for the project.
- Conducted the extraction of data and also processed the data to make it ready to use for training the model.
- Collaborated with team of experienced analysts and developers to implement the solution for the project.

PROJECTS

Driving Scene Segmentation

[Github](#)

- Performed **Image Segmentation** on the unconstrained environment of Indian roads by using the **IDD** dataset.
- Implemented the **U-Net** model with slight modifications and trained the model for 100 epochs with Jaccard Loss.
- Developed the UI using **Streamlit**. On inference, the model achieved a **Dice Score of 80.04%**.

Estimating Delivery Time

[Github](#)

- Developed **Regression Model** to predict the time taken to deliver the order, based on the parameters such as restaurant location, delivery location, weather and the likes.
- Applied feature engineering, feature encoding and feature selection. Hypertuned **XGBoost** and **CatBoost** using optuna. Finally combined the results from XGBoost and CatBoost.
- Assessed these models using R2 Score, RMSE, Residual Analysis and Homoscedestic test. On Inference, got **R2 Score of 83.51% and 3.811 RMSE value** with combination of XGBoost and CatBoost.

SKILLS

Programming Languages: Python, C++, C

Tools and Databases: Jupyter Notebook, PyCharm, Vs Code, Docker, MySQL

Technical Knowledge: Deep Learning(*ANN, CNN, Object Detection, Segmentation, RNN, LSTM, GRU, Attention, Transformer, BERT, GPT*), Machine Learning, Time Series Analysis, NLP, Recommendation System.

Python Libraries: PyTorch, Tensorflow, Keras, Hugging Face, Rasa, LangChain, NLTK, Gensim, Scikit-Learn, FastAPI, Flask, XGBoost, CatBoost, statsmodel, Pandas, Numpy, Matplotlib, Seaborn, Plotly, Plotly's Dash, Beautiful soup, Scrappy.

ACHIEVEMENTS AND ACTIVITIES

- Finalist** of National Level Hackathon **SIH 2022**.
- Achieved **AIR 322** in TCS Codevita 2022 Season 10 Round 1.
- I write blogs related to Python and Statistics on [Medium](#) with **2K+ views**.

TRAININGS AND CERTIFICATIONS

- Deep Learning Specialization** by [DeepLearning.ai \(Coursera\)](#).
- NLP Specialization** by [DeepLearning.ai \(Coursera\)](#).