Rahul kumar Mahato

Bokaro, JH | rahulkr.kr43@gmail.com | 6207325688 | Rahul kr - Portfolio

LinkedIn | GitHub

Career Objective

I'm an AI/ML enthusiast with a deep interest in building intelligent systems and exploring the latest advancements in Artificial Intelligence, Large Language Models (LLMs), and Generative AI. I have hands-on experience in developing machine learning & deep learning predictive modeling, NLP-based AI-driven applications.

Seeking an opportunity to leverage my AI and machine learning skills to deliver impactful solutions, drive growth, and contribute to cutting-edge projects within a dynamic team

Education

Central University of South Bihar, Gaya, Master of Science in Data Science and Applied Statistics — Present

- CGPA: 8.27/10.0 | 3rd Semester SGPA: 9.02

Binod Bihari Mahato Koylanchal University, Dhanbad, Jharkhand , Bachelor of Science in Mathematics — 2019 – 2022

- GPA: 7.66/10

Skills

Languages: Python ,R, SQL

Technologies: Numpy ,Pandas,Seaborn, Scikit-learn,Mlflow,TensorFlow, Keras, PyTorch,Retrieval-Augmented Generation (RAG), Hugging Face Transformers, LangChain,GPT models.
Tools & Platforms: Tableau ,IBM Spss, Linux , Git, Collab , Hugging Face

Experience

AI/ML Industrial training, National Institute of Electronics and Information Technology(NIELIT) , Patna — present

- Working on Deep Learning and NLP-based projects, focusing on building intelligent models for natural language understanding. Leveraging advanced neural networks and transformer-based deep learning architectures with recovered generation and few-shot voice cloning for personalized human-computer interaction

Data science Poster Presentation Coordinator ,Central University of South Bihar, Gaya — Dec 2024

- Organized and presented a poster on "Contributions to Data Science and Machine Learning by Indian Scholars and Industries".Highlighted how Indian statisticians contributed to solving real-world problems through innovative data science and machine learning methods.

Projects

An Emotionally Intelligent Voice Chatbot Using Deep Learning — Present

- Overview: Developed an advanced voice chatbot capable of emotionally intelligent conversations, powered by Retrieval-Augmented Generation (RAG) and few-shot voice cloning. The chatbot detects emotional tone in user input and generates personalized responses while replicating a specific person's voice using minimal audio samples for a highly personalized conversational experience.
- Applications: Customer support, virtual assistants, therapeutic chatbots, and personalized AI communication.
- Tools Used: TensorFlow, Hugging Face Transformers, OpenAI Whisper, Python, Flask, Langchain

Prediction of Air Quality Index (AQI) for Mumbai Region — July 2024 - Dec 2024

- Developed a machine learning model to predict Air Quality Index (AQI) for Mumbai using historical air quality data. The project focuses on handling missing values, preprocessing data, and evaluating the performance of multiple regression models. Decision Tree and Random Forest models demonstrated superior performance.
- Tools Used: Python: Pandas, NumPy, Matplotlib, Seaborn
- Machine Learning: Linear Regression, Decision Tree, Random Forest, KNN, SVR (Scikit-learn)