RITANKAR JANA

Kolkata, West Bengal, India

J 8334826325 ☑ ritankar.jana.official@gmail.com in riyalRJ ♠ Portfolio

Education

Academy of Technology 2021 – 2025

Bachelor of Technology in Computer Science (CGPA: 8.99/10)

Hooghly, West Bengal

W.W.A Cossipore English School 2018 – 2020

I.S.C (Percentage: 89.25%)

Kolkata, West Bengal

W.W.A Cossipore English School

I.C.S.E (Percentage: 90.8%)

Kolkata, West Bengal

Relevant Coursework

Data Structures DBMS Operating System Advanced Algorithms Artificial Intelligence Machine Learning

Projects

Stokis | Python, Scikit-Learn, Transformer Code Link

Jan 2024 – Present

- Developed an advanced stock prediction platform leveraging external data sources like **Yahoo Finance** to enhance prediction models with historical data and technical indicators.
- Implemented a CNN-BiLSTM model achieving an R² value of 0.95 for stock price prediction, significantly improving platform functionality.
- Fine-tuned a BERT-based model (FinBERT) on a custom Hugging Face dataset to achieve 97.2% accuracy for news sentiment classification.
- Currently integrating sentiment analysis into the prediction model to further improve accuracy and expand platform capabilities.

GadgyHub Application | React, Node.js, Express, MongoDB, Redis, TailwindCSS Code Link Ja

- Engineered a modern e-commerce platform with advanced technologies like **Redis for caching**, **Cloudinary for image** management, and **Stripe for secure payment processing**.
- Crafted an interactive and responsive UI leveraging **React** and **TailwindCSS**, employing **Zustand** for state management while incorporating **Framer Motion** animations and **React Confetti** for celebration effect to enhance user engagement
- Designed and tested **RESTful APIs** for authentication, product management, cart operations, and payments, utilizing tools like Postman and **MongoDB Compass** for optimization.

TriNayan: AI-Powered Currency Detection | YOLOv8, ViT, OpenCV Code Link June - September 2024

- Pioneered an AI-powered solution using fine-tuned YOLOv8 and Vision Transformers (ViT) to assist visually impaired individuals in detecting and recognizing currency notes, achieving an accuracy of around 70%.
- Improved user engagement and autonomy by delivering real-time annotated images, increasing reliability by 75%, using tools such as OpenCV and Python

Lingua-AI: Personalized English Tutor | Groq, Deepgram, Streamlit, LangChain Code Link

July 2024

- Created a language learning application to enhance the **personalized English learning experiences**.
- Achieved a 75% increase in user engagement and learning effectiveness through features like Conversation Practice,
 Grammar Testing, and Vocabulary Improvement, while incorporating real-time audio interaction between learner and tutor using Deepgram.

Technical Skills and Interests

Languages: Java, Python, Javascript

Database: MySQL, Oracle, MongoDB, Redis

ML/DL Libraries: Scikit-Learn, Pandas, Matplotlib, LangChain, NumPy

Web Frameworks: Node.js, Express, React

Area of Interest: Data Science, Artificial Intelligence, Generative-AI

Extracurricular Activities and Achievements

Participated in HaRBInger 2024- RBI Hackathon

May 2024 - Oct 2024

Talent Next Java Certification from Wipro

May 2024 - Sept 2024

Open-source Contributions in Hugging Face

2024