Ritankar Jana

Kolkata, West Bengal, India
8334826325 ritankar.jana.official@gmail.com riyalRJ 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 **2018**
I.C.S.E (Percentage: 90.5%) *Kolkata, West Bengal*

Relevant Coursework

Data Structures DBMS Operating System Advanced Algorithms Artificial Intelligence Machine Learning

Projects

GadgyHub Application | *React, Node.js, Express, MongoDB, Redis, TailwindCSS* **Code Link** **January 2025**

- Developed a modern e-commerce platform with advanced technologies like **Redis for caching**, **Cloudinary for image management**, and **Stripe for secure payment processing**.
- Implemented a dynamic and responsive UI using **React with TailwindCSS**, **Zustand for state management**, **Framer Motion** for animations, and **React Confetti** for enhanced user experience.
- Designed and tested **RESTful APIs** for authentication, product management, cart operations, and payments, utilizing tools like Postman and **MongoDB Compass** for optimization.

Advanced Authentication System | *Node.js, Express, MongoDB, Nodemailer* **Code Link** **October 2024**

- Developed a modular authentication system featuring user signup, email verification, secure login, logout, and password reset functionality using **Node.js**, **Express**, and **MongoDB**. Incorporated **JWT for token-based authentication**, ensuring robust account management and security.
- Integrated advanced features **like email notifications for verification and password resets** using **Nodemailer**, with tokens managed securely for expiration. Designed reusable components like token generators, cookie handlers, and email templates to enable seamless integration into larger applications such as e-commerce or enterprise platforms.

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

- Developed 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%**.
- Enhanced user interaction and independence by providing real-time annotated images and boosting **reliability by 75%**, leveraging tools like OpenCV and Python.

MoodLens : Emotion Recognition System | *CNN, OpenCV, Python* **Code Link** **August – October 2023**

- Enhanced emotion recognition accuracy by leveraging custom **CNN architectures like VGG16 and ResNet50v2**, achieving an **optimal classification accuracy of 66%**.
- Improved model robustness through **image augmentation and class weighting techniques**, addressing class imbalance within the **FER-2013 dataset** and **increasing accuracy by 10%**.

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
Soft Skills: Teamwork, Communication, Problem solving, Adaptability, Leadership
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