

Driven by plain curiosity that ignited my strong passion for AI and ML, I tackle intricate challenges with innovative imagination and technical accuracy, converting complex problems into innovative, high-impact solutions.

SKILLS

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|--------------|---------------|--------------------|
| ○ Python | ○ Mern stack | ○ Machine learning |
| ○ Django | ○ Postgres | ○ Deep Learning |
| ○ Flask | ○ MongoDB | ○ NLP |
| ○ JavaScript | ○ ETL, Pandas | |
| ○ React | ○ TensorFlow | |

Projects

GitHub: iamrahulr30

Unsplash Clone MERN + S3

- Created a photo-sharing web application using the **MERN** (MongoDB, Express.js, React, Node.js) stack. Integrated Amazon **S3** for efficient storage and retrieval of images, providing users with a modern and responsive platform for sharing and exploring visual content.

NewsCat

- Engineered a Celery-powered ETL pipeline for real-time news classification. Collected training data via **web scraping** and applied **NLP** techniques with TensorFlow and SpaCy. Utilized asynchronous Celery tasks for efficient article processing and classification.

KelvinWarp: Image & Video Deformation

- Implemented image and **video deformation** using the Kelvinlet technique, focusing on displacement and inversion for realistic, elastic-like effects. Developed parallel and sequential pipelines with OpenCV, Ray, and NumPy to efficiently apply Kelvinlet inversion to images and videos.

ChromoNet

- Chromosome Image Classification employs transfer learning with **ResNet** for precise chromosome image classification. Utilizing Flask on the backend, streamlines model deployment and inference for efficient analysis, Achieved 95% classification accuracy, streamlining chromosome analysis for research and medical applications.

AI-Enhanced Tic Tac Toe & Personalized Music Recommendations

- Developed a Deep Learning-powered Tic Tac Toe engine with adaptive AI strategies. Engineered a Music Recommendation System utilizing Cosine Similarity for personalized music suggestions, enhancing user experience.

Static Blog Deployment — starryreads.com

- Deployed a static blog on **AWS S3** with **Cloudflare CDN**, secured using **AWS Lambda** to allow access only through Cloudflare, boosting performance and security.

Education

Vellore Institute of Technology (VIT -Vellore),
M.Tech in Artificial Intelligence and Machine Learning
(2024–2026). **CGPA : 8.73**
Kingston Engineering College
B.E Computer Science and Engineering (2020 – 2024) .

Coding Profiles

Kaggle: Rahul30
Codewars: rahulr30