

30-July-2003 | AI/ML Enthusiast

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**OBJECTIVE:** Passionate AI/ML researcher focused on innovating and building impactful solutions through experimentation and continuous learning.

### □ IAMRAHULR30

## PROJECTS:

## KelvinWarp: Image & Video Deformation

o Implemented Kelvinlet-based image and video deformation for realistic elastic effects using OpenCV, Ray, and NumPy, optimizing parallel pipelines for up to 89% faster processing.

# **BART-Based Question Answering for Research Papers**

 Fine-tuned a BART-based model for question-answer generation in physics and mathematics research papers.
Optimized NLP pipelines using Pytorch and Hugging Face.

#### NewsCat

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

### **Violence Detection System**

 Built with ConvLSTM model for video analysis to detect violence. Used OpenCV or frame extraction and integrated FaceRecognition to identify individuals involved in detected events.

# ChromoNet

 Crafted a high-precision chromosome image classifier using transfer learning and a Flask backend, achieving 95% accuracy to streamline biomedical analysis.

## Unsplash Clone MERN + S3

 Developed a sleek photo-sharing web app using the MERN stack(MongoDB, Express.js, React, Node.js) with Amazon S3 for robust image storage and responsive performance.

# Blog Deployment - starryreads.com

 Launched a secure static blog on AWS S3 with Cloudflare CDN, using Lambda and EventBridge for daily automation.

#### **TECH STACK:**

AI/ML - TensorFlow, PyTorch, NLP, ETL, OpenCV, NLTK

**Frameworks –** Django, Flask, React, MERN stack.

**Databases -** PostgreSQL, MongoDB.

**Languages -** Python, JavaScript, C, Java .

# **CODING PROFILES:**

Leetcode : Rahulraj\_30Kaggle : Rahul30

🥝 Github : Iamrahulr30

### **ACHIEVEMENTS:**

- ✓ Solved 200+ problems on LeetCode.
- ✓ Runner-up in Inter-College and Zonal-Level Basketball matches.

### Interests:

- Books,
- Basketball,
- ঐ Running,

## **EDUCATION:**

**Vellore Institute of Technology (VIT)**, Vellore *M.Tech in CSE - Al & ML* (2024 – 2026) | **GPA 8.97 Kingston Engineering College** 

B.E in Computer Science Engineering (2020 – 2024) | GPA 7.91

# **CERTIFICATIONS:**

- Machine Learning in Production DeepLearning.Al, Coursera
- Full Stack Python Programming Naan Mudhalvan (GUVI)
- Complete Python Bootcamp Udemy