AKSHAYA GULLA

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PROJECTS

PNEUMONIA DETECTION: LEVERAGING XAI TECHNIQUES FOR MODEL INTERPRETABILITY

Tech Stacks: Python, Tensorflow

- Designed and implemented a CNN model to classify chest X-ray images for pneumonia detection
- Achieved a classification accuracy of 97% in detecting pneumonia from chest X-ray images
- Applied LIME and SHAP for interpretative insights, resulting in a 50% improvement in model transparency and a 30% reduction in client inquiries about decision processes, boosting trust and satisfaction

LEARN FLOW- BLOG APPLICATION

Tech Stacks: Node.js, Express.js, MongoDB, Ejs

- Built a full-stack web application with a role-based access control system, differentiating between "Creator" and "Student" roles, and integrated OAuth 2.0 authentication
- Engineered a hierarchical data structure to enable infinite threaded comments on videos, ensuring a smooth and organized discussion experience
- Leveraged AWS services (S3 bucket and CDN) for efficient storage and delivery of uploaded videos and images, and implemented Pre-Signed URLs to allow direct uploads to the S3 bucket

TEXT SUMMARIZER

Tech Stacks: Numpy, Pandas, Scikit-learn, NLTK, HTML, CSS, JS, Node.js

- Explored related methodologies to the paper "Fuzzy Inference-based Models for Extractive Text Summarization," presented at the 2023 IEEE International Conference on Computer Vision and Machine Intelligence (CVMI)
- Developed an accurate Text Summarizer using advanced Machine Learning techniques, incorporating fuzzy logic for precise content condensations
- Led the end-to-end development of an interactive website for the Text Summarizer, leveraging a stack of web technologies

POSITION OF RESPONSIBITIES

ROTARACT CLUB OF YOUTH, IIITM | TECHNICAL HEAD

GRAPHIC DESIGNING March 2022 – Present

- Designed 15+ posters and presentations for various events on Adobe Photoshop and Canva
- Initiated and participated in social welfare events such as cloth donation, buy a book campaign and blood donation

STUDENT GYAN MOVEMENT, IIITM | EXECUTIVE MEMBER

January 2022 – Present

- As a member of the club provided education for 100+ underprivileged students
- Engaged with the local community by collaborating with 15+ schools to promote educational opportunities

EDUCATION

IIITM, GWALIOR

INTEGRATED DUAL DEGREE IN INFORMATION TECHNOLOGY December 2021 - present GPA: 7.46

ADITYA JUNIOR COLLEGE

CLASS 12TH (AP STATE BOARD) May 2020 Percentage : 96%

ST. JOSEPH'S CONVENT

CLASS 10TH (ICSE, NEW DELHI) March 2018 Percentage: 82%

SKILLS

PROGRAMMING

• C • C++ • Java • SQL

WEB DEVELOPMENT

• HTML • CSS • Node.js • Express.js

TOOLS

• VS Code • Code Blocks • MYSQL • OpenGL • Canva • Figma • Adobe Photoshop • Ubuntu • GitHub • Jupyter Notebook

OPERARTING SYSTEMS

• Windows • Linux

LANGUAGES

• English • Telugu • Hindi

COURSEWORKS

- Object Oriented Programming
- Computer Networks
- Data Base Systems
- Operating Systems
- Data Structures
- Design and Analysis of Algorithms
- Artificial Intelligence
- Computer Vision

LINKS

Github:// Akshayagulla LinkedIn:// Akshayagulla Leetcode:// Akshayagulla GFG:// Akshayagulla