ARUP SANKAR ROY

+91 9679713408 | asrl20221078.cse.uit@gmail.com | DOB:14.11.2000 | PAN:FNWPR2905F | PORTFOLIO

EDUCATION

UNIVERSITY INSTITUTE OF TECHNOLOGY

Bachelor of Engineering in Computer Science Current cgpa:7.17

Burdwan,West Bengal,India Aug. 2022 – Jul 2025

JALPAIGURI POLYTECHNIC INSTITUTE

Diploma in Civil Engineering | cgpa:8.1

Jalpaiguri,West Bengal,India Sep.2019 - Aug.2022

WORK EXPERIENCE

DATA SCIENCE INTERN

iNeuron Intelligence Pvt. Ltd., India

Jan 2024 – May 2024 Remote

- Implemented TripleMRNet Architecture, utilizing AlexNet and ResNet18 to process MRI images from axial, sagittal, and coronal planes.
- Performed data preprocessing techniques including reshaping, normalization, and image augmentation to enhance model performance.
- Conducted in-depth analysis of tear types, providing insights into their severity and probability.
- Built a web application for doctors and patients to sign in and generate reports based on MRI analysis.
- Generated visualizations, such as bar plots and pie charts, for detailed analysis and interpretation of results.
- Provided comprehensive documentation and user guides to support application use and understanding.
 Github Link

FEATURED PROJECTS

THE ENTITY: A Real-time 3-Phase Illegal Activity Detect and Monitoring System Python|PyTorch|OpenCV|Yolov8|Flask|HTML|CSS|JS

Feb 2024 – March 2024

- Phase 1: Achieves real-time detection of weapons, gambling elements, smoking and other illegal activities from video, eliminating post-processing delays.
- Phase 2: Introduces detection, segmentation, and heatmap presentation of illegal items from images, enhancing analysis with a user-friendly UI.
- Phase 3: Ensures a seamless and efficient user experience for webcam-based detection.
 Github Link

JUNKY: AI-Powered Junk Detection Web App

Python|Yolov5|Flask|HTML|CSS|JS

Nov 2023- Dec 2023

- Manually annotated dataset for trash detection.
- Trained the custom dataset on YOLOv5 and observed astounding accuracy and precision.
- Prepared flask web application to seamlessly deploy and demonstrate the functionality of the trained model.
 Github Link

HOUSEHOLD ENERGY CONSUMPTION PREDICTOR

Aug 2023- Sep 2023

Python |Scikit-Learn| Pandas |Flask| HTML |CSS| JS

- Fetched data from Kaggle, processed it, and performed EDA. Applied Huber Regressor and created a model with 99% accuracy, saved in pickle format.
- Prepared flask application to run the model.and Generated an user friendly UI.
 Github Link

SKILLS

Data Analytics and Visualization Libraries: Numpy, Pandas, Matplotlib, Plotly, Streamlit, Seaborn, Scipy.

Machine Learning Libraries: Scikit-Learn, PyTorch, OpenCV.

Programming Languages: Python, Java, C, Flask, Bash.

System Experience: Linux, Windows.

Softwares: Microsoft Excel.

ADDITIONAL

Lead the team (Tensors) secured rank 5 out of 50+ teams in 'CodeBird HackWitz 2k22'.

Became the Tech Lead of ML/AI/DS in our Coding Club Code Bird UIT, CSE. (2023 - present)

Participated internal hackathon in Smart India Hackathon.

Profile Links: Github | GeeksForGeeks | GeeksForGeeks-2 | LinkedIn