Banajit Rajbongshi

M.Sc. in Physics
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Github Profile
LinkedIn Profile
My Website

Summary

Skilled in Python, TensorFlow, and various data analysis libraries. Proven ability to develop innovative solutions through data-driven insights and advanced modeling techniques. Experienced in handling large datasets, conducting detailed data analysis, and generating actionable business intelligence. Excellent problem-solving, research, and collaboration skills. Eager to contribute to dynamic teams and drive impactful projects in a data-centric environment.

Technical Skills

Languages: C/C++ , Python, JavaScript, HTML , CSS
Libraries : Tensorflow , Keras , Numpy, Pandas , Scikit Learn ,Astropy, ReactJs ,Django
Web Dev Tools: Nodejs, VScode, Git, Github
Frameworks: ReactJs, Django , NextJs
Soft Skills: Problem Solving, Self-learning, Presentation, Adaptability, analysis report , team recruitment

Education

•**Master of Science in Physics** *2024-2026(expected)*
Banaras Hindu University , Uttar Pradesh-221005

•**Bachelor of Science in Physics And Bachelors of Education** *2019-2023*
University of Tezpur , Assam-784028 CGPA: 7.89

Personal Projects

•**AI-Powered Snake Game: Machine Learning and Artificial Intelligence Implementation**
This project showcases the development of a classic Snake game powered by machine learning and artificial intelligence

- Show the prototype of "How Human Brains work" with almost 74% accuracy
- Used statistical models like Regularisation,Gradient Descent to reduce error and multiply accuracy.
- Technology Used:R, Python, TensorFlow, Numpy

•**Assembling a Radio Telescope and Study its Various Implementation and Applications**
develop a Small-scale amateur Radio Telescope, from an off-set parabolic d2h dish antenna

- Collect astronomical data with 96% accuracy to detect Moon, Jupiter and other celestial objects.
- Extensive Data analysis and Error Reduction with statistical model to determine the brightness temperature of sun which was 98% accurate.
- Technology Used: R, Python ,Numpy , Scikit Learn, Arduino , Keras , astropy

Experience

–**Collaborator at IASC(international Asteroids Search Collaboration)** *October 2013- June 2024*
Astronomical data analysis online

* In-depth understanding of data analysis, error handling, ability to identify and cleanse data inconsistencies and inaccuracies.
* Proficient in python libraries like matplotlib , numpy, scikit-learn.
* Strong knowledge of image classification and Convolution Neural Network.
* Hands-on experience in Astronomical Physics, Computational Mathematics, Lower Earth Orbit Asteroids and prediction of their path.

Publications

∗**Real-time Traffic and Traffic Flow Prediction using Machine Learning Algorithm for Optimal Route Planning in Electric Vehicles**

- **Published at:** IEEE Xplore
- **Conference:** 2024 Second International Conference on Computational and Characterization Techniques in Engineering Sciences (IC3TES)
- **DOI:** 10.1109/IC3TES62412.2024.10877654

Achievements

∗**Detected two undiscovered asteroids** at IASC, India *November, 2023*

- As a Co-Leader of my team "AstronX", I co-lead my team to analyse and detect two asteroids named as P21L87C , P21L87X which was further sent to NASA for further process of detection and certification.