ARNOB BARUA

 GitHub

📞 +86-13511768265 ✉ 228801143@stu.yzu.edu.cn 📍 Hanjiang, Yangzhou,Jiangsu, China.

Personal Profile

A motivated and analytical Computer Science student at Yangzhou University with a strong interest in **Computer Vision , Pattern Recognition** and **AI application .** Experienced in implementing deep learning models, including Convolutional Neural Networks (CNNs), and passionate about developing intelligent systems that connect visual data with real-world applications. Seeking to pursue a Master's degree in Artificial Intelligence and Machine Learning to deepen research and contribute to impactful technological innovation.

Education

Yangzhou University : BSc in Software Engineering   Sep 2022 – Jul 2026
- **GPA** : 3.70 (up to 6th semester)
- **Academic Ranking** : Top 4 in the cohort
- **Yearly Performance** :
    Year 3 : 90% average
    Year 2 : 80% average
    Year 1 : 87% average

    Relevant Courses:
    Data Analysis and Application(ongoing), Artificial Intelligence Project Practice(ongoing), Advanced Mathematics A(Calculus - part1 & part2),Linear Algebra, Data Structure and Algorithms, Probability and Statistics, Python Programming

Skills

Programming Languages

C / C++ , Python (Advanced) , SQL , JavaScript , HTML , CSS

Tools & Technologies

TensorFlow , Keras , Scikit-learn , NumPy , Pandas , Matplotlib , Seaborn , Git , Docker , Streamlit , Node.js , OpenCV, LabelMe , image preprocessing & augmentation tools

Competitions & Certificates

- **Kaggle** : Initial contributor and actively participating in competitions, gaining practical experience in machine learning and data analysis.
  Link : https://www.kaggle.com/arbbarua

- **Codeforces** : Earned the Specialist rating in weekly contests and solved over 800+ problems, demonstrating strong problem-solving and algorithmic skills.
  Link : https://codeforces.com/profile/ARB__01(For Problem Solving)
       https://codeforces.com/profile/bshkort (For Contest)

- **Kaggle Machine Learning Intermediate Course :** Completed with Excellence, strengthening practical ML and data science expertise.

Project Experience

Plant Disease Classification with CNN

- Developed an end-to-end image classification pipeline using the PlantVillage dataset, including data preprocessing, class balancing, augmentation, and training a Keras CNN model through a robust tf.data pipeline, achieving 89.31% accuracy across 38 plant disease classes.

Technologies: Python, TensorFlow/Keras, tf.data, Pillow, scikit-learn, Matplotlib, NumPy, Streamlit, Dockerfile

Link : https://github.com/Barua02/Plant_Disease_Classification_with_CNN

Content-Based Music Recommendation System

- Developed a scalable content-based music recommendation engine analyzing 10,000+ song lyrics using NLP techniques, including text preprocessing (tokenization, cleaning), TF-IDF vectorization, and Nearest Neighbors with cosine similarity, and deployed it as an interactive, modular, and reproducible Streamlit web application for real-time recommendations.

Technologies: Python, Streamlit, scikit-learn, NLP, NLTK, Pandas

Link : https://github.com/Barua02/Content-Based-Music-Recommendation-System-

Reference

Dr. Zhu Xinfeng
Associate Professor
College of Information Engineering
Yangzhou University, China
Phone : +86-17751360234,
Email : cxj731209@163.com

Xiangjian Chen
Associate Professor
College of Information Engineering
Yangzhou University, China
Phone : +86-17751860234,
Email : cxj831209@163.com