JASMIN JAHAN PUSPO

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EDUCATION

B.Sc (Engg.)	North East University Bangladesh Major: Computer Science & Engineering CGPA: 3.54/4.00	January 2017-June 2021

RESEARCH INTEREST

- Medical Imaging
- Computer Vision
- Machine Learning

RESEARCH EXPERIENCE

Undergraduate Thesis | NEUB   Sylhet, BD
Supervisor: Muhammad Mahir Hasan Chowdhury   July 2020-June2021

- Segmented gray images via Mask R CNN algorithm and classified shapes using CNN to obtain their stage.
- Defended thesis to the board members of the department.

PERSONAL PROJECTS

Fully Automatic Computer-aided Mass Detection and Segmentation Via Pseudo-Color Mammograms and Mask R-CNN:
- Conceptualized and implemented this research paper during my undergrad thesis.
- Reduced image size using MatLab; data size: 8.38 GB; Mask R CNN algorithm experimented on Gray and PCM images and predicted 67% and 87% accuracy, respectively.

Object Detection & Segmentation:
- Gathered and annotate data (15 images) using VGG annotator; Created charts in Google Colab to perform preliminary analysis and visualize data using Matplotlib.
- Detect and segment aimed object via Mask R CNN algorithm leading to 95% success.

ACADEMIC PROJECTS

Breast Cancer Classification:
- Utilize an ideal CNN model to classify the binary stages of cancer with 87% accuracy on the MIAS dataset.

Bangla Money Recognition-Kaggle:
- Classified Bangla Nine note's with KNN, Linear Regression, and CNN algorithms from scratch and compared them with Scikit Learn libraries to obtain similar accuracy.
- Key achievement: Github Arctic Code Vault Contributor 2020.

Titanic Survival prediction-Kaggle:
- Trained Random Forest, KNN algorithms to make predictions such that passengers would survive or not and receive a 71% score.

Tic Tac Toe:
- Designed a 5*5 GUI interface in Python using the Tkinter module that decides win, lose or tie between player vs computer.

Object Info:
- Collected short description and a single image of 25 objects from the internet as input; output is identified and briefly described as an object with pronunciation.

Desktop Application:
- Find out specific files from desktop local disks written in Java.

Study Management System:
- Design and establish a user-friendly website with PHP, HTML5, CSS3, and MySQL where students can store their study materials.

Medicare:
- Establish an interactive website that provides health-related information using PHP, HTML5, CSS3, and MySQL.

TECHNICAL SKILLS

Programming Languages: Proficient in C, Java, Python
Data Analysis Tools: Scikit-learn, OpenCV, Numpy
Deep Learning Frameworks: TensorFlow, Keras

COURSES ON DATACAMP

Biomedical Image Analysis in Python by Stephen Bailey   certificate
Image processing in Python by Rebeca Gonzalez   certificate

LANGUAGES

Bangla: Native Language;   **English**: Fluent Language;   **Hindi**: Fluent Language