Batch Number	BB-4
Team Members	N.Ashok (**22471A05B2**) Ch.Sudheer Reddy (22471A0582) Y.Venkata Krishna (22471A05D9)
Guide	M.Koteswara Rao M. Tech
Title	**CyclicAugment: Optimized Medical Image Analysis via Adaptive Augmentation Intensity**
Domain/Technology	DEEP LEARNING
Base Paper Link	**https://ieeexplore.ieee.org/document/11005973**
Dataset Link	**https://zenodo.org/record/5208230/files/breastmnist.npz**
Software Requirements	Browser: Any latest browser like Chrome Operating System: Windows 7 Server or later Python (COLAB)
Hardware Requirements	SystemType: Intel Core i5 or above RAM: 8 GB Number of cores:5 Number of Threads: 4
Abstract	This study introduces **CyclicAugment**, a new data augmentation method for improving medical image analysis. Traditional augmentation methods sometimes harm model accuracy by distorting important diagnostic details. To solve this, CyclicAugment gradually increases and then decreases the augmentation strength during training in a cycle. This approach improves data diversity while still preserving critical information. An adaptive learning rate is also used to maintain stable training. The framework was validated on 12 two-dimensional datasets and 6 three-dimensional datasets publicly available datasets from the **MedMNIST** benchmark.

Signature of the student(s)   Signature of the Guide   Signature of the project coordinator