**COMPUTER VISION**

**Lab-02 Date:05-08-2023 [Monday]**

**Instruction:**

1. Use Python programming language and implement the given programs.
2. Submit your program PDF and Executable file format in Google Classroom before leaving the lab (Google Collab link or Jupiter note python file).
3. Complete the homework assignment before the next lab.
4. Study the basics of image processing, and computer vision using Python.
5. Explore the image datasets.
6. Implement your task during lab time and submit it before leaving the lab.

**Experiment Number -01:** Write a program to perform Image Classification:

* 1. Use online image datasets (MNIST).
  2. Create a Unimodal, Hybrid model, and Multimodal using given algorithms:
     + Machine learning
     + Deep learning
     + Transfer learning
  3. Evaluate the model performance:
     + Split dataset into Train, Test, and Validation
     + Accuracy, Loss, Precision, Recall, F1-score, Dice coefficient, and other parameters

**HOMEWORK ASSIGNMENTS**

**Date of Submission: 12-08-2024**

**Assignment 1**: WAP will perform image classification using medical imaging and identify the disease based on the datasets.

1. Use online image datasets like Physionet, official websites, research paper links and Other source.
2. Create a Unimodal, Hybrid model, and Multimodal using given algorithms:
   * + Machine learning
     + Deep learning
     + Transfer learning
3. Evaluate the model performance:
   * + Split dataset into Train, Test, and Validation
     + Accuracy, Loss, Precision, Recall, F1-score, Dice coefficient, and other parameters
4. Submit complete documents with dataset and code.