Final Project Deadline: May 2<sup>nd</sup>, 2023

**Points:** 100

Q. Train a deep learning classifier for any binary image classification task of your choice. The deep-learning classifier should consist of a set of convolutional and fully connected layers followed by the final output layer for image classification. Extract features from the samples in the validation set (using one of the fully connected layers of your model) and train a SVM (linear or non-linear) using these samples for the same classification task. Test this SVM on the test set (extract the features from the test set using the same fully connected layer). Use appropriate metrics to evaluate the SVM model on the test set.

## **Deliverables:**

- 1. Well documented code (50 points)
- 2. Your analysis on the results obtained in the form of a half-page to one-page report in a PDF format (50 points).