ML DL Project 1
Image Classification

1. **Emotion Recognition Data**

   Dataset: Emotion Recognition Data
   https://www.kaggle.com/datasets/jonathanoheix/face-expression-recognition-dataset

   Using the face expression recognition dataset, build your own CNN model to optimize the recognition performance based on knowledge we learned so far. Your team reports overall accuracy, confusion matrix, training/validation curves of accuracy and loss, and python code with detailed comments (Jupyter Notebook with instance code results).

2. **Don't Touch Your Face**

   Dataset: We will create our own dataset using the Teachable Machine.

   "Class 1 Touch"
   "Class 2 No hands"
   "Class 3 No Touch w/ Hands"

   Collect your images over 300 per class. Download as *.zip files and add your name information like below:

   "Class 1 Touch-jykim.zip"
   "Class 2 No hands-jykim.zip"
   "Class 3 No Touch w/ Hands-jykim.zip"

   Make the three zip files into one file like below:
   Project_1_2_jykim.zip
   Submit the data file. We will combine all data and make it usable to everyone. If you are uncomfortable with sharing your images, please contact the instructor.

   Based on the collected data, you need to build your own CNN model to optimize the recognition performance based on knowledge we learned so far. Your team reports overall accuracy, confusion matrix, training/validation curves of accuracy and loss, and python code with detailed comments.

In this project, three students can be a group, and one submission can be accepted by three students. If you prefer to work alone, that would also be fine. As a group, your report needs to describe the role of each team member. The final report should be in pdf format and explain what your team has been working on. Format should be IEEE manuscript template. You should make a team name and show your team's name on the report. Reports can be the same, but all individuals should submit the report on Canvas.

https://www.ieee.org/conferences/publishing/templates.html