- Work in teams of 1-2 members, at most 2 members of one team.
- Must work on deep learning projects. Each group selects one of the following projects.
- Each group is required to design and train the DL models for the project. For example, if your group has 2 members, this group is required to design and train 2 different DL models. Typically, each of the member in the team must design and train at least one DL model.

CECS 456 — Project List

1. Natural Images with 8 classes
https://www.kaggle.com/datasets/prasunroy/natural-images

2. Medical image of 6 classes
https://www.kaggle.com/datasets/andrewmvd/medical-mnist

3. Chest X-Ray Images
https://www.kaggle.com/datasets/paultimothymooney/chest-xray-pneumonia

4. Animal pictures of 10 different categories taken from google images
https://www.kaggle.com/datasets/alessiocorrado99/animals10

5. Bring your own dataset and do discuss with instructor first. You can also check https://www.kaggle.com/ for your own deep learning project.

Dataset/Idea Reference:

1. https://paperswithcode.com/datasets
2. https://archive.ics.uci.edu/datasets
3. https://www.kaggle.com/datasets

4. http://cs231n.stanford.edu/project.html
5. https://github.com/ageron/handson-ml2

Report Requirement:

1. The text of the report must be prepared using 12 point type and 1 inch margins. Project report should be around 3-4 pages and **include** the link of GitHub for the project.
2. Everyone is required to submit their report to Canvas, whether it's a group project or a solo project.
3. Make sure the code from the provided GitHub link is **runnable**, the experimental results from the code should be the exactly same as the presentation and report.
4. Instructor will run your code for testing.
5. The sections of project report should include: Introduction; dataset and related work; methodology section; experimental setup; measurement; result analysis, intuitions and comparison; and conclusion.

Total 15 points =Introduction (1 point) + dataset and related work (1 point) + methodology section (2 points) + experimental setup (1 point), measurement (2 points) + results analysis, intuitions and comparison (3 points) + conclusion (1 points) + your contribution in the code (4 points).

6. The contributions of each team member should be **made clear** in the report.
7. The report contains six parts: (1) the whole organization of the report, (2) written quality, (3) detailed data description, (4) solid model designing, (5) detailed experiments, training and testing procedures of your proposed models and (6) **each individual's contributions.**
8. **Report Reference:** http://cs231n.stanford.edu/2017/reports.html