

- Working in teams of 2-4 members, each team should send **only one** email to inform the instructor about the topic title and team members' names and student id numbers by **Nov 9th, 2021**.
- Required to work on deep learning projects, each group is required to design at least 2 different DL models.
- If you decide to do project alone, please do discuss with instructor first.

## **CECS 456 — Project List (suggested)**

1. Animal pictures of 10 different categories taken from google images  
<https://www.kaggle.com/alessiocorrado99/animals10>

2. Natural Images with 8 classes  
<https://www.kaggle.com/prasunroy/natural-images>

3. Chessman image dataset  
<https://www.kaggle.com/niteshfre/chessman-image-dataset>

4. Medical image of 6 classes  
<https://www.kaggle.com/andrewmvd/medical-mnist?select=BreastMRI>

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.

### Presentation Requirement:

1. Each group is required to give one technical presentation of the project. The presentation is expected to be around 20-minutes, and at least 10-minutes.
2. The organization of presentation should contain: introduction, dataset description and related work, methodology part, experimental design and results, analysis and conclusion.
3. Required to use slides for presentation and need to submit the slides **before** the presentation day onto Dropbox folder. **Only one** submission for each group. The instructor may ask questions during your presentation, and your answers to questions are part of your evaluation.
4. The presentation should be done by **all** team members. The contributions of each team member should be made clear in the presentation.
5. Evaluation of the presentation contains three parts: slides, the presentation performance of the whole group and each individual's contribution to the project.

### Report Requirement:

1. Project report should be around 3-4 pages and **include** the link of GitHub for the project.
2. **Only one submission** of the report for each group onto Dropbox folder.
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, results measurement, analysis, different models' comparison and conclusion.
6. The contributions of each team member should be **made clear** in the report.
7. Evaluation of 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. Please feel free to check the example reports from the previous years.

Grade of Presentation:  $6 \text{ (shared)} + 4 \text{ (individual)} = 10$  of final grade

Grade of Report:  $12 \text{ (shared)} + 8 \text{ (individual)} = 20$  of final grade