Project Announcement: CS 5890/6890 Special Topics Applied Deep Learning (02/13/2024)

Hi class !
Time to fix your groups for projects. This project will be an **individual/group (maximum 2 students)** project.
The project can be:

- A research or survey project on following topics:
    - Machine learning or deep learning theories and applications
    - Computer vision
    - Speech recognition
    - Natural Language Processing/ Text mining
    - Graph representation learning
    - Generative modeling
- A research project
    - A Kaggle project: https://www.kaggle.com/competitions
    - Research project based on new project ideas
        - How to get new ideas?
            - Recent ML conference and journal papers such as NeurIPS, ICML, ICLR, CVPR, JMLR, KDD, TKDE, ECCV, EMNLP, AAAI, IJCAI, ICDM, CIKM, and SDM. Another source of papers is arxiv.
        - Be careful about the availability of the dataset
    - Deliverables: project proposal presentation (**02/22/2024**), 1 page project proposal report (**02/22/2024**), one research paper presentation (**03/19/2024** and **03/21/2024**), and final project paper (6 pages 2 column IEEE format; without references; due **04/23/2024**), and final project presentation (**04/18/2024** and **04/23/2024**).
- A survey project
    - Reading a large number of papers from the abovementioned venues
    - Deliverables: project proposal presentation (**02/22/2024**), 1 page project proposal report (due **02/22/2024**), one research paper presentation (**03/19/2024** and **03/21/2024**), and final project paper (8 pages 2 column IEEE format; without references; due **04/23/2024**), and final project presentation (**04/18/2024** and **04/23/2024**).
- If your work is good, you will not only get good grades in the project but also you might have an option for conference paper/journal submission with the collaboration of the instructor.

Other useful links:

- Google's Python class
- Google Colab Tutorial
- TensorFlow Tutorials
- Pytorch tutorials
- mxnet tutorials