Final Project

(CMPSC 448; modified 11/03/2023)

Project description: Find a classification task you are interested in working on, implement and compare any **two** deep learning systems among the **three** options (Convolutional Neural Network, Recurrent Neural Network, Transformer-based systems) on this task.

Participants: individually or as a group (max 5 members in a group)

Task & Data: you decide

Requirements: no

What you need to submit (deadline 11:59pm on 12/02/2023):

URL of your github repository, including

- **A PDF (with your name or all members in your group) file describes everything**
- **Code files** for the two algorithms

Submit through Canvas assignments.

Evaluation:

- **PDF quality (80%)**: we score by the following five aspects:
  - Task & dataset & preprocessing (16 scores)
  - The implementation & architectures of two deep learning systems (16 scores)
  - The training details of two deep learning systems (16 scores)
  - The results & observations & conclusions (16 scores)
  - The challenges & obstacles you met and your solutions (16 scores)

  For individual participants, points will be deducted in units of **5**; for group participants, points will be deducted in units of **8**.
- **(optional) Presentation (20%)**: Each participant (individual or group) can choose whether you want to present or not. You can get a default score **18** (out of max 20) for the presentation part if you choose NOT (such as your scores of other parts can secure an "A" for you). If you choose to present, the evaluation standard is the same as the midterm project (slide quality, work quality, presentation skills, etc.) For individual presentations, points will be deducted in units of **2**; for group presentations, points will be deducted in units of **4**.
- **If it is a group project, each team member gets the same score**.