Due Date: February 23rd (11pm), 2022

<u>Instructions</u>

- Find the practical assignment in the form of a Jupyter notebooks, main-EN.ipynb (English version) or main-FR.ipynb (French version), in Github repository. The repo includes everything you will need except the data.
- The data can be found in this Google Drive link.
- For questions 1,2,3 and 4, you will have to fill parts of the code in the file solution.py (from the Github repo). This is the file that should be uploaded to the course GradeScope for auto-grading.
- Work off the template and DO NOT modify the name of the file solution.py since the code will be automatically graded. It is very important that you only add code in the specified locations and do not modify the designated input or outputs!
- Your solution to question 5 should be written as a LaTeX document (no longer than one page). You can use this latex as a template for that.
- TAs for this assignment are Matthew Scicluna and Akram Erragabi.

Once you have located the Github repo and the Google Drive folder, you can begin the assignment. We will provide the instructions to run the notebook in Google Colab, but you should be able to adapt it on whatever computing platform you would like to use.

How to run code in Google Colab

First copy the dataset er.zip to your drive with right click \rightarrow "make a copy". Next, clone the github repo and upload the contents to your drive. Make all the contents of the repo and er.zip are in the same directory!

You can then open main-EN.ipynb (English version) or main-FR.ipynb (French version) using Google Colab.

Note: you may need to install Colab first. If you are not familiar with Colab, please consult the tutorials for more information.

You will be prompted to allow access to your drive folder.

For the section entitled "Link your assignment folder install requirements", please write the full path to the directory you will be working in. If you are in your root, this would be: /content/gdrive/MyDrive/.

Please follow the instructions in the notebook very carefully. The docstring in solution.py should also be helpful.

Problem 5 Report

Please hand in your solution to problem 5 as a one page PDF. This question involves training your network to reasonable performance, and evaluating what it has learned. If you are running your code on Colab, note that each epoch can take an hour. Therefore, you should save your model (and any other quantities of interest) at least once per epoch. If you have done the assignment properly, you will find that your model performs adequately after a few epochs, so you do not need to train for very long.