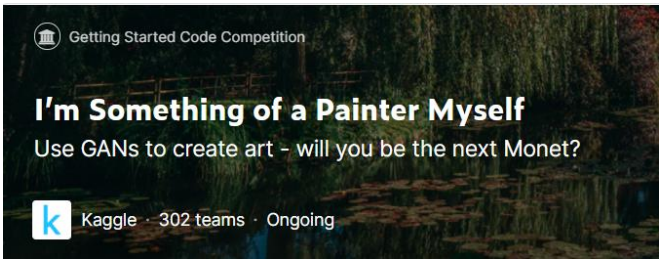
BIU – Deep Learning - Final Project

As part of this course, students must complete a project instead of a final exam.

The goal of this final project is to summarize the main topics that we have discussed in the course using some practice and theory.

Especially, in the field of cycleGAN.

In this project you will solve the Kaggle competition https://www.kaggle.com/c/gan-getting-started/data



The monet directories contain Monet paintings. Use these images to train your model.

The photo directories contain photos. Add Monet-style to these images.

But…in this project you have one more constrain

The original Monet directory in this challenge contains 300 Monet paintings sized 256x256 for training.

You allowed to use only 30 paintings in the training as part of this competition.

Your goals in this project are

1) To solve this challenge with the above constrain (use only 30 paintings)

2) Submit your code to the competition site according the challenge rules - this is a competition part.

3) Use all knowledge that you got in your course (and more - studies, papers) to solve the challenge.

4) There is no limitation of what are the 30 images for training. You select them. You can use algorithmic ideas for the selection.

5) Submit a final report.

5) In addition to the Kaggle submission, you need to supply also 2 google colab notebooks. One notebook for a training phase and one for the inference.

Notebook Submission must include everything so the course team can run it.

6) Use Python & standard DL platform: Keras, TensorFlow, PyTorch

Due Date

Final Project submission is due July 08th at 11:59pm.
You must create a Kaggle teamName for this competition and send it to me due June 15.

Submission:

Final submission:
Detailed written Report, graphs, Source code links (to google collabs) , relevant images and README.
The report should be in the style of a conference paper, including introduction, motivation, related work, etc.

An example: `https://www.overleaf.com/read/dxbmbpnwbjbq`

All writing should be your own -- all quotes must be clearly attributed.

Upload a zipped version to the LEMIDA-BIU
You can upload a link to a **private** github repository to hold the source code, and a README file that provides a brief guide to run your code. In this case, you just need to provide the github link within your final report.

Be very clear about what code you've used from other sources, if any. Clear citations are essential. Failure to credit ideas and code from external sources is cheating.
Make sure you evaluate both the good and bad points of your approach.

Even if you didn't accomplish your goal, evaluate what you did.
Do not forget to include the project title, your name and ID in this file.
Max number of pages: 8 (but you don’t have to use them all).

Team size

The project will be performed in groups of 2 students.

Academic Integrity

Team/student may not copy code from other team/students. Copying answers or code from other students for a project is a violation of the university’s honor code and will be treated as such. All suspicious activity will be reported to the Department Head and the university authorities.

Giving code to another student is also considered a violation. Students are responsible for protecting their work from copying.

If you build some of your code on existing work and utilize existing code (your own or code found on the web), you must give proper attribution to all existing work that you build on and make clear what your new contribution is. Any unattributed or uncited work that you use will be considered a breach of academic honesty and dealt with according to the course policy in the syllabus.