Final Project

Deep Learning Model for Image Classification

Points: 100   **Due Date: 25/06/2021**

Submission Window: 11:00 p.m. to 11:59 p.m. (June 25, 2021)

Do not submit the assignment outside the submission window.

About the Data

MNIST Fashion Dataset

Deliverables

The Python Notebook containing the complete, organized and well documented code with the following statistics:

Split your dataset into training and testing sets.

Accuracy, Losses and F1 Scores for both Testing and Training datasets.

Instructions:

Create a Google Colab / Jupyter Notebook.

Explore the relationships between the output label and features. Plots are always helpful for such kinds of analysis.

Create your Deep Learning Model, which classifies the data into the given classes.

(It is always helpful to plot losses and accuracy against these quantities to better understand how changing them is affecting your training process.)

(I recommend using Google Colab to avoid all the installation-related issues. You don't need to install anything. You can work right from your browser.

 For more info, please go through this link: https://towardsdatascience.com/getting-started-with-google-colab-f2fff97f594c)

How to submit the Assignments?

1. Go to https://github.com/vanshbansal1505/ICG-Summer-Program-2021-DS/ and fork this repository.

2. Push all the files that you want to submit in the **appropriate** folder of the forked repo. Name your folder "`<Roll Number>_<Name>`" (without quotes.) Strictly follow this convention in each of your submission otherwise it will be rejected.

   (For example, if I want to submit the files x, y and z for the nth assignment, then I'll put them in folder named `190941_VanshBansal` and I'll put this folder in the `Assignment-n` folder of my forked repository.)

3. Create a pull request **only during the submission window**. All other pull requests will be rejected.

4. Before the next assignment, fetch upstream your forked repo.

5. Go to Step 2.

(If you are new to GitHub and are using

- Windows, look at this: https://www.youtube.com/watch?v=_NrSWLQsDL4
- Linux, look at this: https://blog.scottlowe.org/2015/01/27/using-fork-branch-git-workflow/

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Honor Code of Ethics

1. Be Regular and complete all the assignments timely.

2. Read the instructions carefully.

3. Maintain the highest standards of honesty and integrity.

4. Use the internet to learn, not to copy.

5. Always cite the source if you are taking some idea or code snippet from there; otherwise, we will consider it as copying.

Any unethical/unprofessional conduct or violation of any of the above-mentioned points will be dealt with very strictly.