**CS5542 Big Data Apps and Analytics**

**In Class Programming –8**

**Due 21st March 2022 (11:59 pm CST)**

**Variational Autoencoders:**

**Use the same data and source code but add two more layers to encoder path and their corresponding two layers to decoder path, run the new model and report your findings. In your report specify which 4 layers (2 layers in encoder path and 2 layers in decoder path) have you added and explain why you added those (their function).**

**Examples of layers that can be added Conv2D, Batchnorm, Conv2DTranspose etc.**

ICP Requirements:

1. Successfully executing the code with new architecture for encoder and decoder path
2. Explanation of new layers
3. overall code quality
4. Pdf Report quality, video explanation

Submission Guidelines:

1) Sign in into your GitHub account

2) Click on this link : <https://classroom.github.com/a/yqXF_est>

3) Accept the ICP-7 (Assignment 7)

4) Complete your ICP and create your wiki report (Pdf or Word doc).

5) Folders for ICP:

1. Create two folders for source code and documentation
2. Source code folder contains only the code and output file (if applicable)
3. Documentation folder contains wiki report and the images of your results

6) The wiki report should have at least the following:

a. What you learned in the ICP

b. ICP description what was the task you were performing

c. Challenges that you faced

d. Screen shots that shows the successful execution of each required step of your code

e. Out put file link if applicable

f. Video link (YouTube or any other publicly available video platform)

g. Any inside about the data or the ICP in general

7) Upload your ICP folders to your assignment GitHub repository

8) Click on the add a readme file on the next page and write done your and your partner names and emails.

You are all Done!!!!!!!