ECE 239AS.2, Spring 2025   **Project 1: GAN & VAE**
Neural Networks & Deep Learning 2   Prof. J. Kao
UCLA   TAs: S. Dong, J. Lee, K. Pang, X. Yan

Due Monday, April 21 2025, by 11:59pm to Gradescope.
13 points total.

1. (13 points) **Implement Generative Adversarial Networks.** Complete
   gan.ipynb and **gan.py**. Print out both files and submit them as one pdf
   to Gradescope. If Gradescope lets you submit separate files then separate is
   fine. Before printing/converting to PDF, **be sure to expand all output
   cells**. For optimal formatting, use a built-in function to convert to PDF,
   e.g. "Download as". If it doesn't work, you can use the print page function,
   but be sure that all relevant outputs are legible.

2. (12 points) **Implement Variational Autoencoders.** Complete **vae.ipynb**
   and **vae.py**. Print out both files and submit them as one pdf to Gradescope,
   as above.

As you might notice, the images generated are imperfect since the model trained
for only one epoch has not yet converged.