Due on May 14, 2020
Seoul National University

Homework 5

INSTRUCTIONS

- The homework is due at 9:00am on May 14, 2020. Anything that is received after that time will be considered to be late and we do not receive late homeworks. We do however ignore your lowest homework grade.
- Homeworks need to be submitted electronically on ETL. Only PDF generated from LaTex is accepted.
- Make sure you prepare the answers to each question separately. This helps us dispatch the problems to different graders.
- Collaboration on solving the homework is allowed. Discussions are encouraged but you should think about the problems on your own.
- If you do collaborate with someone or use a book or website, you are expected to write up your solution independently. That is, close the book and all of your notes before starting to write up your solution.

1 Setup [0 points]

1. In this homework, we will build and experiment with convolution networks, intialization, and regularizers. You must use Google Colab, which provides free GPUs.

2. Upload hw5 files to your Google Drive.

3. Ensure you are periodically saving your notebook (File → Save)so that you don't lose your progress if you step away from the assignment and the Colab VM disconnects.

4. Once you have completed the Colab notebook, 1) download the ipynb notebook file and 2) Click File → Print → Save as PDF

5. Submit the resulting ipynb and the PDF file to ETL.

2 VAE [100 points]

Follow and complete `VAE.ipynb`.