## Thursday February 15 - with Dr.Diggans (mentor) & Professor Chen (instructor)

Last week: outline the overall blueprint and milestones of the whole project. Discussed
which datasets and sample CNN we might want to use to do the image classification
task and further extract the intermediate feature space before the final classification
layer.

## About Dataset:

 Dr.Diggans and I decided to use the Cifar-10 dataset (that I already found and downloaded) with 50000 training images and 10000 testing images to conduct image classification tasks.

## About CNN architecture:

- Dr.Diggans believed for now, a sample CNN (maybe borrowed from Kaggle) with a relatively decent classification accuracy is enough, so I proceeded to borrow one CNN architecture implemented in PyTorch.
- The sample CNN architecture has a feature vector of length 512 in the intermediate layer before the final classification layer. Dr.Diggans suggested changing the vector length to some small numbers like 64 to prevent the dataset matrix from growing too huge.

## Next week:

- Finish reports and Meeting minutes.
- Modify the sample CNN and extract the intermediate layer of feature space for each image vector in Cifar-10 with respect to the whole training dataset and subsample of it (so that we should have huge matrices to represent the training dataset and subsets).
- Upload the modified PyTorch code to GitHub for Dr.Diggans to review.