CS492(D) 전산학특강 <스마트에너지를 위한 인공지능> Fall 2019

Homework 1

Date assigned: 19 Sep 2019

Professor Ho-Jin Choi Date due: 27 Sep 2019

Submit your homework file (HW1.ipynb) to your TA via email (gks8030@gmail.com) by the due date. Late submissions will not be accepted. Write your student ID and name on the 'Information' section in HW1.ipynb file.

Questions:

In this assignment, you are going to build and train a feed-forward neural network model to classify images of clothing, like sneakers and shirts. To do this, TA will provide ***HW1.ipynb*** which includes the codes such as loading the dataset. Using this ipynb file, write your code for the following steps:

Step 1. Scale values of the loaded Fashion MNIST dataset to a range of 0 to 1

Step 2. Define a feed-forward neural network using `tf.keras.Sequential`

Step 3. Compile the defined model with appropriate optimizers, loss functions and metrics.

Step 4. Train the model at least 10 epochs using the training data

Step 5. Evaluate the trained model using test dataset

Extra points:

TAs will rank the submissions based on the test accuracy and assign extra points according to the rank. Please note that you should not use convolutional neural networks to do this assignment.

For more information on writing code please refer to the ipynb files TAs provided.

Reference: Deep learning practice (Week 1)