

Assignment 06

CNN

The Fashion-MNIST dataset is proposed as a more challenging replacement dataset for the MNIST dataset. It is a dataset comprised of 60,000 small square 28×28 pixel grayscale images of items of 10 types of clothing, such as shoes, t-shirts, dresses, and more. The mapping of all 0-9 integers to class labels is listed below.

0: T-shirt/top

1: Trouser

2: Pullover

3: Dress

4: Coat

5: Sandal

6: Shirt

7: Sneaker

8: Bag

9: Ankle boot

Create a convolutional neural network (CNN) architecture to classify the ten different types of objects present in the fashion MNIST dataset.

Note:

Loading the dataset:

```
from keras.datasets import fashion_mnist
(trainX, trainy), (testX, testy) = fashion_mnist.load_data()
```

Please note the following:

Dataset is added along with

Do the assignment in Jupyter notebook/colab

Add the .ipynb file to GitHub as public and share the link in Paatshala