I have successfully trained my NN model for an accuracy of 96.4%(training) & 95.83%(validation) and which can be improved by running it for more epochs. I have used Google colab with GPU for fast process.

**Highlights of assignment:**

* I first examined my CSV file and wrote a code for downloading images from URL using response function in python. In this step I took some help of stake overflow to solve my error but I understood the logic behind the function that how it works.
* I kept my first 14000 images for training and rest of them for testing.
* I examined that my dataset had 17 different dress patterns.
* I created different folder for each class to ease my training process.
* Then I created the neural network with fully connected convolution layers with the maxpooling layer for better feature extraction from each inputs.
* I used image generator or keras API for performing some augmentation to increase my training data i.e. for better results.
* My training accuracy and validation accuracy is fluctuating. We can you dropout layer to take care of this but it will make my classifier weak (Dropout, during training, slices off some random collection of these classifiers. Thus, training accuracy suffers) or we can shuffle our data and then divide it into training and testing set(hit and trial method)
* At last I have written a code to classify manual image given by user.

**Data summary**

* Data consist of 15702 images of different types of dresses.
* There are total 17 types of different dresses(17 classes)
* All images are of type RGB.
* I have used 3\*3 filter convolution filter on every image and took a input of an image as 64\*64\*3.
* I have used filter size of 2\*2 in my maxpooling layer which reduces the size of image by 2.

**NOTE:**  I have also done a bonus assignment below my main code and which is working perfectly. For any error in the code or for simplification please revert me I will try to do as per my best.

Thank You

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