

 Return to "Al Programming with Python Nanodegree" in the classroom

DISCUSS ON STUDENT HUB

Create Your Own Image Classifier

REVIEW	
CODE REVIEW 4	
HISTORY	

Meets Specifications

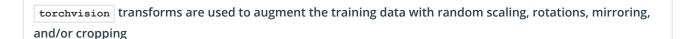
Congratulations!!

It's a job well done, great work here \odot . The way you adapted to previous reviewer's comments and correctly debugged errors speaks volumes about your commitment. Continue the good spirit, and we are looking forward to greater things from you.

Files Submitted

The submission includes all required files. (Model checkpoints not required.)

Part 1 - Development Notebook



The training, validation, and testing data is appropriately cropped and normalized

The data for each set is loaded with torchvision's DataLoader

A pretrained network such as VGG16 is loaded from torchvision.models and the parameters are frozen

A new feedforward network is defined for use as a classifier using the features as input

The data for each set (train, validation, test) is loaded with torchvision's ImageFolder

The parameters of the feedforward classifier are appropriately trained, while the parameters of the feature network are left static

The network's accuracy is measured on the test data

During training, the validation loss and accuracy are displayed

The trained model is saved as a checkpoint along with associated hyperparameters and the class_to_idx dictionary

There is a function that successfully loads a checkpoint and rebuilds the model

The process_image function successfully converts a PIL image into an object that can be used as input to a trained model

The predict function successfully takes the path to an image and a checkpoint, then returns the top K most probably classes for that image

A matplotlib figure is created displaying an image and its associated top 5 most probable classes with actual flower names

Part 2 - Command Line Application

train.py successfully trains a new network on a dataset of images and saves the model to a checkpoint

Well done! the script trains the new network and perfectly saves the model to a checkpoint.

The training loss, validation loss, and validation accuracy are printed out as a network trains

The training script allows users to choose from at least two different architectures available from torchvision.models

Yes the training script allows user to choose from $\boxed{\text{vgg11}}$ and $\boxed{\text{densenet121}}$ models available from torchvision.models. Good job!

The training script allows users to choose training the model on a GPU

The training script allows users to set hyperparameters for learning rate, number of hidden units, and training epochs

The predict.py script successfully reads in an image and a checkpoint then prints the most likely image class and it's associated probability The predict.py script allows users to print out the top K classes along with associated probabilities The predict.py script allows users to load a JSON file that maps the class values to other category names The predict.py script allows users to use the GPU to calculate the predictions **■** DOWNLOAD PROJECT **CODE REVIEW COMMENTS**

RETURN TO PATH

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