################################## 123\_CEDH #################################

The folder include all the codes, saved models and testing results prepared for NTIRE 2019 Dehazing Challenge (url: https://competitions.codalab.org competitions/21163)

Proposed network: "`123' Dense Color Enhance Dehazing Network"

Team name: iPAL\_COLOR

Team leader: Tiantong Guo (tong.renly@gmail.com)

Team members: Venkateswararao Cherukuri, Xuelu Li, Vishal Monga

Time: 03/24/2019

############################## PRE-REQUEST ##################################

To correctly run the test model, the following packages are required.

1. Python 3.6

2. py-torch 1.0

3. openCV

################################# TO RUN ####################################

Navigate to the downloaded folder, in terminal, type:

python MAINTHREAD\_test.py

##########################POST\_PROCESSING################################

To get the post processing results, please copy please go to:

<https://drive.google.com/drive/folders/1Ezzwa-dg15UbkPYZIAd3BNb7Zi5cJ-35?usp=sharing>

(the results generated from this code is pre-loaded in that post-processing folder)

(user can also copy the results from result\_COLOR\_model\_GPU to the post-processing ‘testsets’ folder)

################################# FILES ######################################

1. MAINTHREAD\_test.py: s

The file includes test codes for our proposed network.

Parser arguments:

--cuda (default = True) for running on GPU to reproduce the submitted results,

--model (default = "COLOR\_model") for the model path,

--test (default="testset") for the testset path.

Return: running time and the saving path for results.

2. Model:

The folder includes the network model structure and the saved pretrained model.

(1) \_\_init\_\_.py: required for Python to recognize the package location.

(2) COLOR\_model.pth: the pretrained model for our proposed network using images provided in NTIRE 19 Dehazing Challenge (and the synthetic dense haze images using the data from NTIRE 18)

(3) COLOR\_model.py: the network structure for our "123-CEDH" model

3. result\_COLOR\_model\_GPU:

The folder includes the dehazed images of the test images provided in NTIRE 19 Dehazing Challenge.

(1) ##.png: the dehazed images using our proposed network.

(2) readme.txt: the information for running time, GPU and Data usage

4. testset:

The folder includes the test images from NTIRE 19 Dehazing Challenge.

5. utils:

The folder includes small snippets that can be used though the application.

(1) utils.py: function codes that can be used through the application.