

Supplement S3 File

January 29, 2019

1 Supplement S3 File

1.1 S3 File. Tile images for training.

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In [ ]: #####
        ### This script is used to tile images into smaller images for
        ### ease of use within the process
        ### Use example:
        ### python gen_training_patches.py --root home/test_imagery
        ### --step 32 --size 32 --output home/tiled_out
        ### You can set the step size (# of pixels between the beginning
        ### of one image and the next), and size (the # of pixels in an
        ### image). Combined these give you how many tiles will be created
        ### and the degree of overlap between them. If step and size are
        ### the same, there will be no overlap. If step is less than size,
        ### there will be overlap. If step is greater than size, there
        ### will be gaps between the tiles that are ignored.
import numpy as np
from PIL import Image
import time
import torch
import os.path
import argparse
from scipy import misc
from m_util import *

s = spacewhale()

parse = argparse.ArgumentParser()
parse.add_argument('--root',type=str,default='./Water_Training')
parse.add_argument('--step',type=int,default=500)
parse.add_argument('--size',type=int,default=30)
parse.add_argument('--output',type=str,default='./water')
opt = parse.parse_args()
opt.im_fold = opt.root
opt.results = opt.output
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s.sdmkdir(opt.results)
opt.input_nc =3
imlist=[]
imnamelist=[]

for root,_,fnames in sorted(os.walk(opt.root)):
    for fname in fnames:
        if fname.lower().endswith('.png'):
            path = os.path.join(root,fname)
            imlist.append((path,fname))
            imnamelist.append(fname)

for im_path,imname in imlist:
    png = misc.imread(im_path,mode='RGB')
    w,h,z = png.shape

    s.savepatch_train(png,w,h,opt.step,opt.size,opt.results+'/' +imname[:-4]+'#')

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