import numpy as np

import matplotlib.pyplot as plt

import os

import cv2

def Moyenne\_Sigma (image):

return(np.copy(image),np.zeros(image.shape))

def rendu(moyenne,sigma,image):

return(np.greater(np.abs(moyenne-image),2\*sigma))

def Code():

Fond =cv2.cvtColor(cv2.imread("C:/Users/hass.chouk/Desktop/Codes/Utile/FichiersTest/winterDriveway(Intermittent)/input/image1.jpg"),cv2.COLOR\_BGR2GRAY)

moyenne,sigma = Moyenne\_Sigma(Fond)

for i in range (2,2501):

image =cv2.cvtColor(cv2.imread("C:/Users/hass.chouk/Desktop/Codes/Utile/FichiersTest/winterDriveway(Intermittent)/input/image"+str(i) +".jpg"),cv2.COLOR\_BGR2GRAY)

name = 'rendu'+str(i)+'.jpg'

moyenne = (i\*moyenne + image)/(i+1)

sigma = np.sqrt((i\*(sigma\*\*2) + (image-moyenne)\*\*2)/(i+1))

cv2.imwrite("C:/Users/hass.chouk/Desktop/Codes/Utile/Rendus/winterDriveway(Intermittent)/Gaussiennnes/image" + name,255\*(rendu(moyenne,sigma,image)))

print(moyenne)

cv2.imwrite('C:/Users/hass.chouk/Desktop/Codes/Utile/Rendus/winterDriveway(Intermittent)/Gaussiennnes/Fond.jpg',moyenne)

return()