

D:\Bitnami\wampstack\apache2\htdocs\ailogi\recogface\train_face.py

```
1  # LBP를 이용한 얼굴 학습
2  import cv2
3  import numpy as np
4  import os
5
6  recognizer = cv2.face.LBPHFaceRecognizer_create()
7  face_cascade = cv2.CascadeClassifier(cv2.data.haarcascades + 'haarcascade_frontalface_default.xml')
8
9  path = 'dataset'
10
11 def get_images_and_labels(path):
12     image_paths = [os.path.join(path, f) for f in os.listdir(path) if f.endswith('.jpg')]
13     #print('img_path:',image_paths);
14     face_samples = []
15     ids = []
16
17     for image_path in image_paths:
18         print('img_path:',image_path);
19         gray_img = cv2.imread(image_path, cv2.IMREAD_GRAYSCALE)
20         print('val: ',os.path.split(image_path)[-1].split(".")[2])
21         face_id = int(os.path.split(image_path)[-1].split(".")[2])
22         faces = face_cascade.detectMultiScale(gray_img)
23
24         for (x, y, w, h) in faces:
25             face_samples.append(gray_img[y:y + h, x:x + w])
26             ids.append(face_id)
27
28     return face_samples, ids
29
30 print("Training faces. It will take a few seconds. Wait ...")
31 faces, ids = get_images_and_labels(path)
32 recognizer.train(faces, np.array(ids))
33
34 recognizer.write('trainer.yml')
35 print(f"{len(np.unique(ids))} faces trained. Exiting program.")
36
```