

```
1 import cv2
2 import os
3
4 # Set the actual path to the directory containing your images
5 input_directory = r"C:\Users\rkssp\Desktop\TEFologic PRO\JECTS\Extract Faces From Image\images"
6 xml_path = r"C:\Users\rkssp\Desktop\TEFologic PRO\JECTS\face blur\haarcascade_frontalface_default.xml"
7 output_directory = os.path.join(os.getcwd(), 'Extract Faces From Image', 'Faces')
8
9 try:
10     os.makedirs(output_directory, exist_ok=True)
11 except FileNotFoundError as fee:
12     print('Exception Occurred:', fee)
13
14 faceCascade = cv2.CascadeClassifier(xml_path)
15
16 image_files = [f for f in os.listdir(input_directory) if f.lower().endswith(('.png', '.jpg', '.jpeg', '.gif', '.bmp'))]
17
18 for image_file in image_files:
19     img_path = os.path.join(input_directory, image_file)
20     img = cv2.imread(img_path)
21
22     faces = faceCascade.detectMultiScale(img, scaleFactor=1.1, minNeighbors=4, minSize=(30, 30))
23     i = 1
24     scale_factor = 6
25
26     for (x, y, w, h) in faces:
27         face_img = img[y:y + h, x:x + w]
28         scaled_face = cv2.resize(face_img, (w * scale_factor, h * scale_factor))
29
30         cv2.imshow(f"Face {i} - High Resolution", scaled_face)
31         cv2.waitKey(0)
32
33         filename = f'Face_{i}_HighRes_{image_file}'
34         cv2.imwrite(os.path.join(output_directory, filename), scaled_face)
35         i += 1
36
37 cv2.destroyAllWindows()
38
39
40
```