

```
1 import cv2
2 import os
3
4 img_path = r"C:\Users\rkssp\Desktop\bharathi.jpg"
5 xml_path = r"C:\Users\rkssp\Desktop\TEFologic PRO\JECTS\face blur\haarcascade_frontalface_default.xml' # Provide the correct local path to the XML
   file
6
7 img = cv2.imread(img_path)
8 faceCascade = cv2.CascadeClassifier(xml_path)
9
10 if faceCascade.empty():
11     raise IOError("Error loading haarcascade_frontalface_default.xml file. Check the path.")
12
13 faces = faceCascade.detectMultiScale(img, scaleFactor=1.1, minNeighbors=4, minSize=(30, 30))
14
15 directory = os.path.join(os.getcwd(), 'Extract Faces From Image', 'Faces')
16
17 try:
18     os.makedirs(directory, exist_ok=True)
19 except FileNotFoundError as fee:
20     print('Exception Occurred:', fee)
21
22 os.chdir(directory)
23
24 i = 1
25 scale_factor = 6 # Adjust the scale factor based on your preference
26
27 for (x, y, w, h) in faces:
28     FaceImg = img[y:y + h, x:x + w]
29
30     # Scale up the face
31     scaled_face = cv2.resize(FaceImg, (w * scale_factor, h * scale_factor))
32
33     # Display the scaled face
34     cv2.imshow(f"Face {i} - High Resolution", scaled_face)
35     cv2.waitKey(0) # Wait for a key press
36
37     # Save the scaled face on disk
38     filename = f'Face_{i}_HighRes.jpg'
39     cv2.imwrite(filename, scaled_face)
40     i += 1
41
42 cv2.destroyAllWindows()
43
```