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**OpenCV with blink detection**

Followed along to this article here: <https://pyimagesearch.com/2017/04/24/eye-blink-detection-opencv-python-dlib/>

detect\_blinks.py path: C:\Users\20Jan\venv\Scripts\detect\_blinks.py

blinking\_test.mp4 path: C:\Users\20Jan\blinking\_test.mp4

pip packages installed in C:\Users\20Jan\venv\Scripts

Spyder python interpreter: C:\Users\20Jan\venv\Scripts\python.exe

Downloaded dlib shape\_predictor\_68\_face\_landmarks.dat here: <https://github.com/italojs/facial-landmarks-recognition/blob/master/shape_predictor_68_face_landmarks.dat>

Guide to install openCV (also instructions to install on Raspberry Pi): <https://pyimagesearch.com/opencv-tutorials-resources-guides/> (pip install opencv-python worked fine for me)

Actually, just pip uninstalling and pip reinstalling opencv-python worked.

Steps to run:

1. cd C:\Users\20Jan\venv\Scripts\
2. activate
3. $ python detect\_blinks.py --shape-predictor shape\_predictor\_68\_face\_landmarks.dat

Somebody reworked the blink detection to work with mouth detection: <https://github.com/mauckc/mouth-open/tree/master>

A diagram of a face detection

Description automatically generated

**Dealing with Low Light conditions:**

“Dlib face detector is a very precise one. But as a cost it has low recall, especially when images are bad and/or faces are small. Try another face detector, like Seeta <https://github.com/seetaface/SeetaFaceEngine> Pico <https://github.com/nenadmarkus/pico> or OpenCV Those may provide detections. But false detections as well.”