

Background subtraction

1. Gaussian Mixture-based background / foreground segmentation algorithm

Note: webcam light still on ==> pip install opencv-python==3.4.0.14 (<https://stackoverflow.com/questions/51974632/webcam-light-still-on-after-cam-release>) (<https://stackoverflow.com/questions/51974632/webcam-light-still-on-after-cam-release>)

but not solved yet

```
In [1]: import numpy as np
import cv2

cap = cv2.VideoCapture(0)

#Initialize background subtractor
bs =cv2.createBackgroundSubtractorKNN()
```

```
In [2]: while True:
    ret, frame = cap.read()

    # Apply background subtractor to get foreground mask
    fg_mask = bs.apply(frame)

    cv2.imshow('Output', fg_mask)
    if cv2.waitKey(1)==13:
        break

cap.release()
cv2.destroyAllWindows()
```