

- OpenCV-Python codes for Sobel edge operator

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# sobelx.py - filter using Sobel_x

import cv2 as cv
import numpy as np

I1 = cv.imread('circuit.jpg')
cv.imshow('Circuit',I1)

# define Sobelx kernel values
h = np.array([[1, 2, 1],[0, 0, 0],[-1, -2, -1]])
print(h)

I1e = cv.filter2D(src=I1, ddepth=-1, kernel=h)
cv.imshow('Output image',I1e)

cv.waitKey(0)
cv.destroyAllWindows()
```

```
>>> %Run sobelx.py
```

```
[[ 1  2  1]
 [ 0  0  0]
 [-1 -2 -1]]
```

