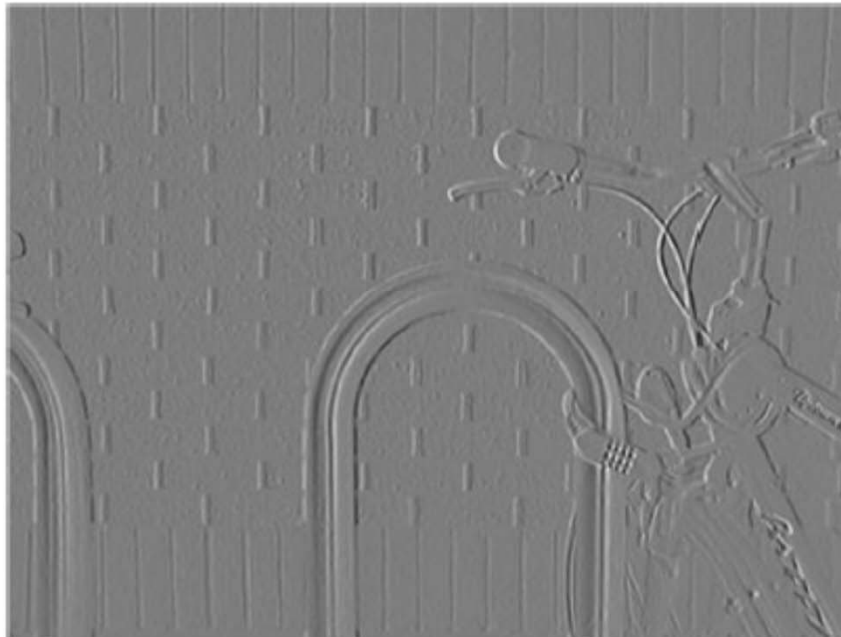
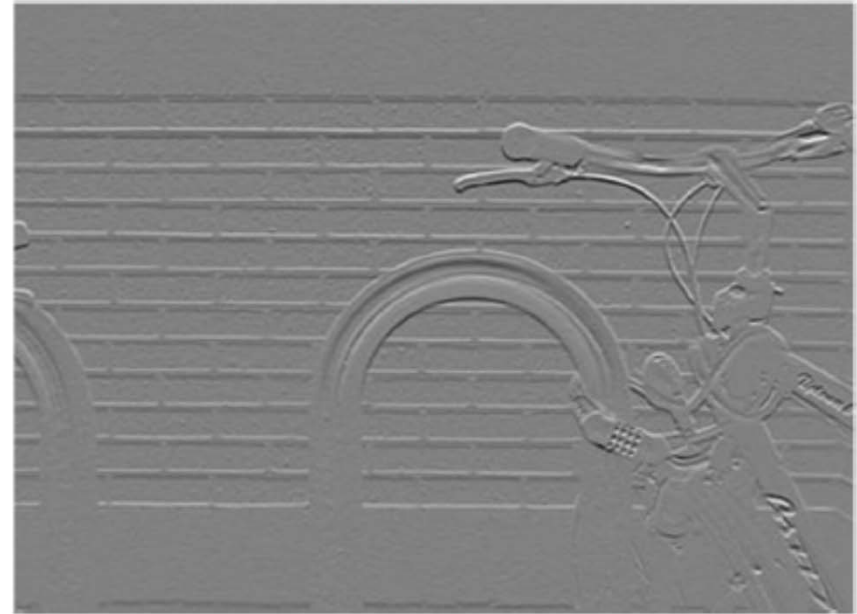


Lab 05

Sobel Edge Detector

Sobel Filter example



```
# 0.8 is multiplied not to make the result become > 1  
im_input = io.imread('_image1.jpg', as_grey=True)*0.8
```

```
sobel_x = np.zeros( (3,3) )  
sobel_x[0,0] =   
sobel_x[1,0] =   
sobel_x[2,0] =   
sobel_x[0,2] =   
sobel_x[1,2] =   
sobel_x[2,2] = 
```

```
sobel_y = 
```

```
im_sobel_x = filter( im_input, sobel_x )  
im_sobel_y = filter( im_input, sobel_y )
```

```
io.imsave( 'sobel_x.png', im_sobel_x/4 )  
io.imsave( 'sobel_y.png', im_sobel_y/4 )
```

Project

- Edge Detection Challenge