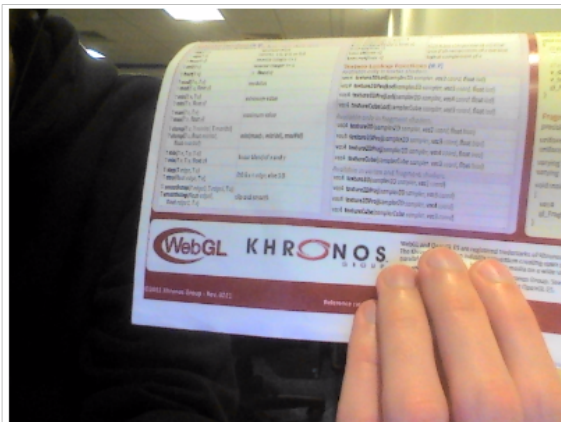


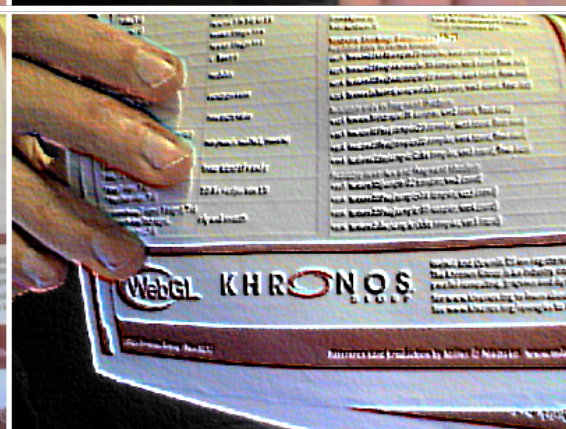
blur

```
[1, 2, 1,
 2, 0, 2,
 1, 2, 1]
```



emboss

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

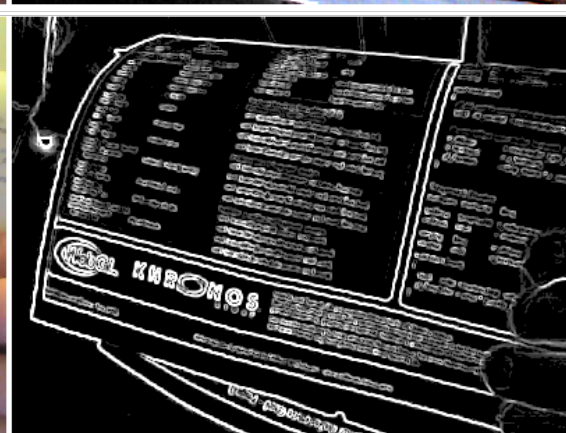
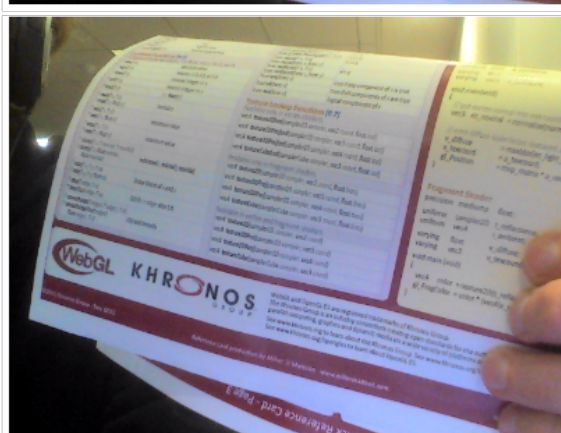


sobelX

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

sobelY

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



$$\text{Edge magnitude} = \sqrt{G_x^2 + G_y^2}$$