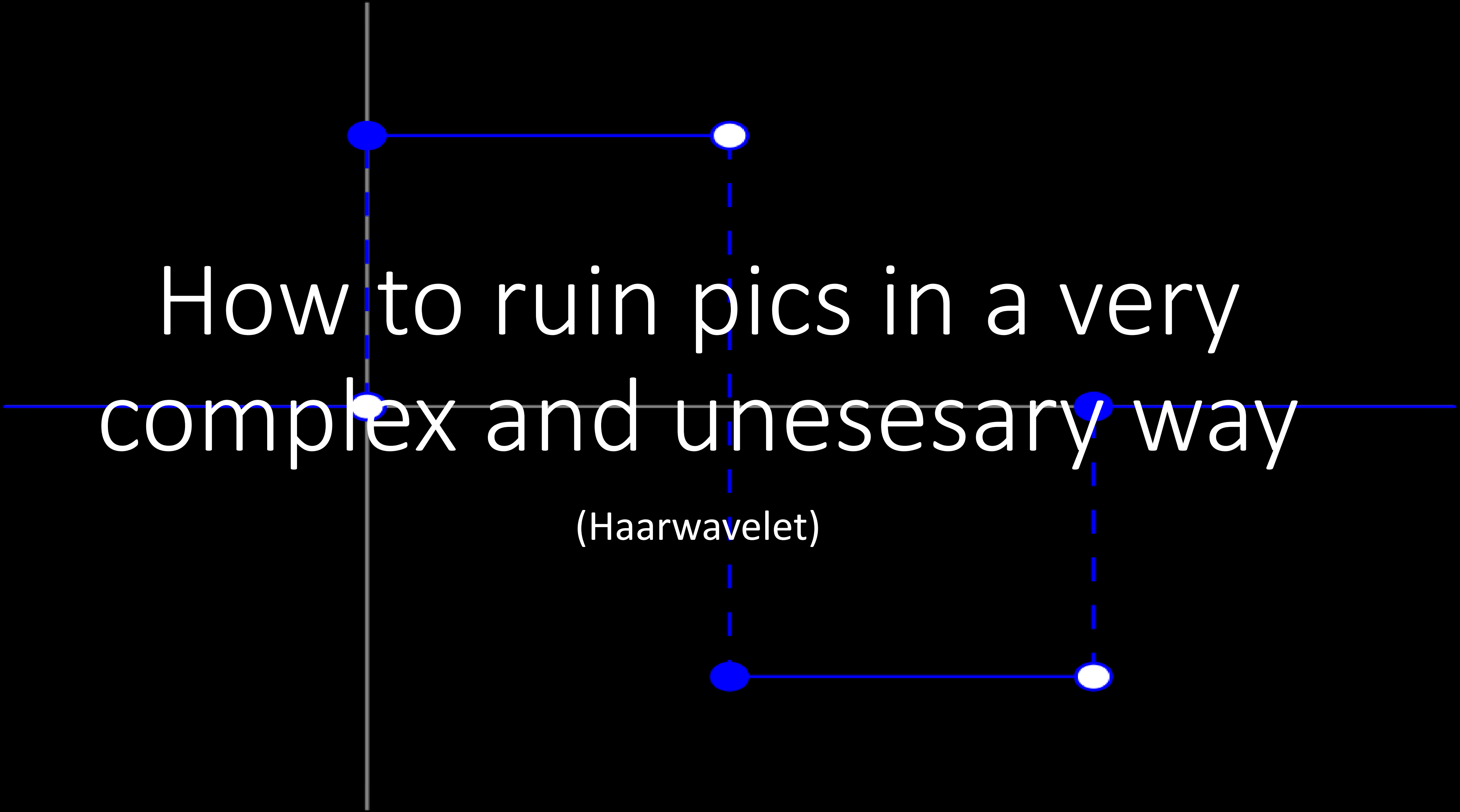
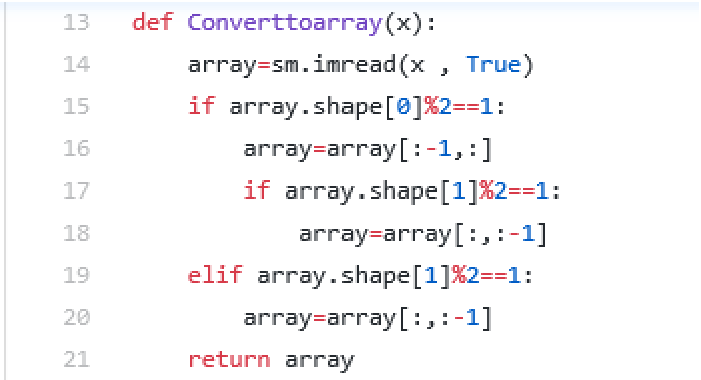
How to ruin pics in a very complex and unesesary way

(Haarwavelet)

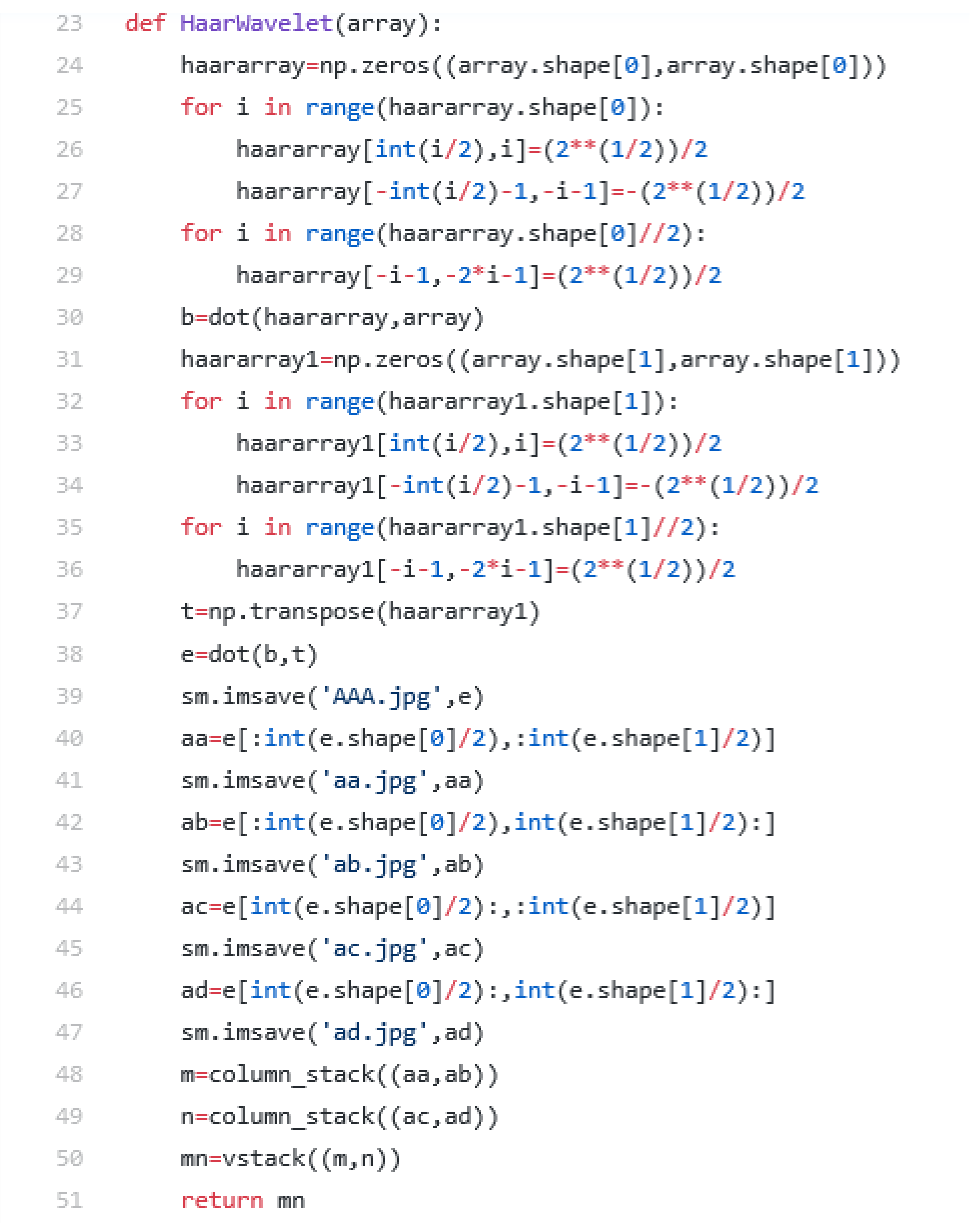


Code

compression



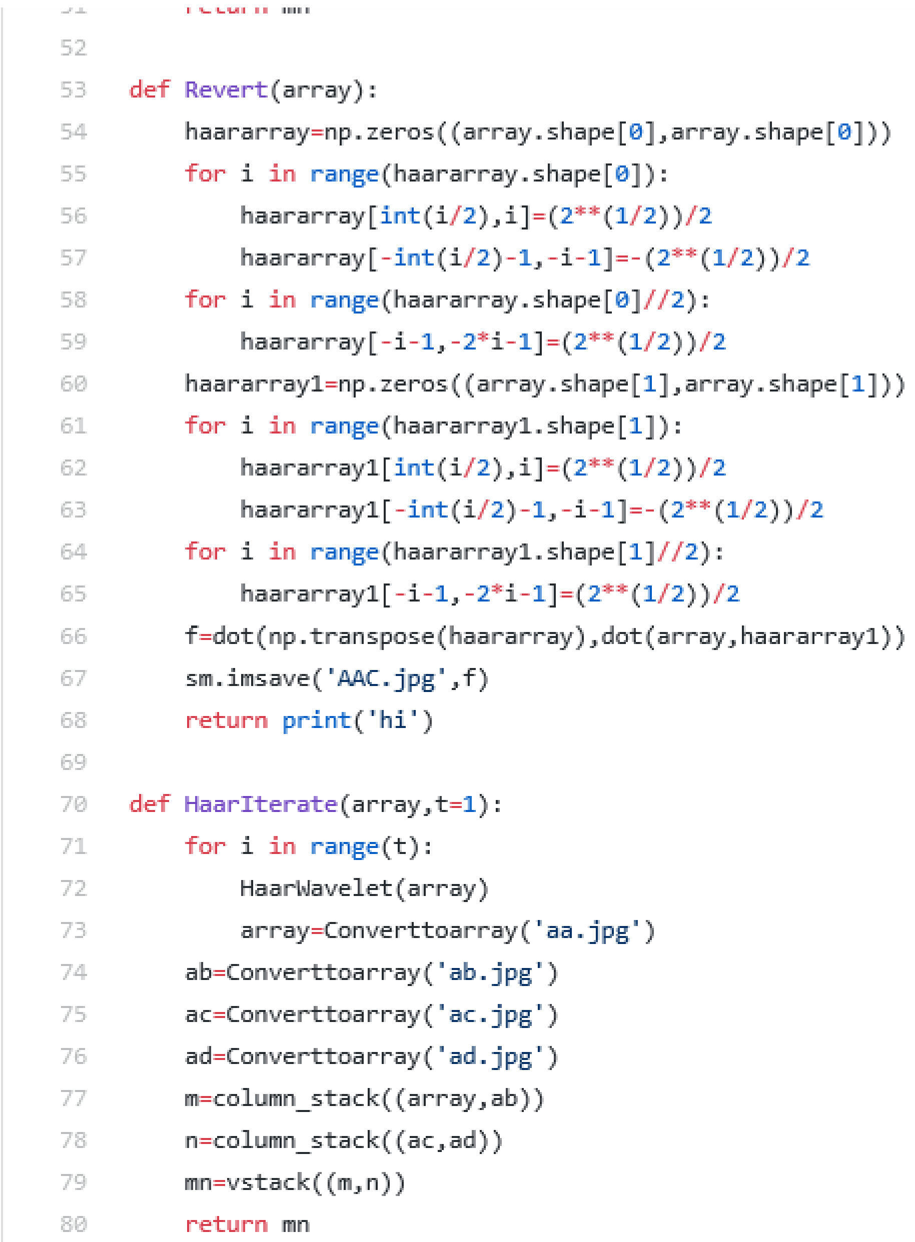
```
def Converttoarray(x):
    array=sm.imread(x , True)
    if array.shape[0]%2==1:
        array=array[:-1,:]
        if array.shape[1]%2==1:
            array=array[:,:-1]
    elif array.shape[1]%2==1:
        array=array[:,:-1]
    return array
```



```
def HaarWavelet(array):
    haararray=np.zeros((array.shape[0],array.shape[0]))
    for i in range(haararray.shape[0]):
        haararray[int(i/2),i]=(2**(1/2))/2
        haararray[-int(i/2)-1,-i-1]=-(2**(1/2))/2
    for i in range(haararray.shape[0]//2):
        haararray[-i-1,-2*i-1]=(2**(1/2))/2
    b=dot(haararray,array)
    haararray1=np.zeros((array.shape[1],array.shape[1]))
    for i in range(haararray1.shape[1]):
        haararray1[int(i/2),i]=(2**(1/2))/2
        haararray1[-int(i/2)-1,-i-1]=-(2**(1/2))/2
    for i in range(haararray1.shape[1]//2):
        haararray1[-i-1,-2*i-1]=(2**(1/2))/2
    t=np.transpose(haararray1)
    e=dot(b,t)
    sm.imsave('AAA.jpg',e)
    aa=e[:int(e.shape[0]/2),:int(e.shape[1]/2)]
    sm.imsave('aa.jpg',aa)
    ab=e[:int(e.shape[0]/2),int(e.shape[1]/2):]
    sm.imsave('ab.jpg',ab)
    ac=e[int(e.shape[0]/2):,:int(e.shape[1]/2)]
    sm.imsave('ac.jpg',ac)
    ad=e[int(e.shape[0]/2):,int(e.shape[1]/2):]
    sm.imsave('ad.jpg',ad)
    m=column_stack((aa,ab))
    n=column_stack((ac,ad))
    mn=vstack((m,n))
    return mn
```

Code

- Revert



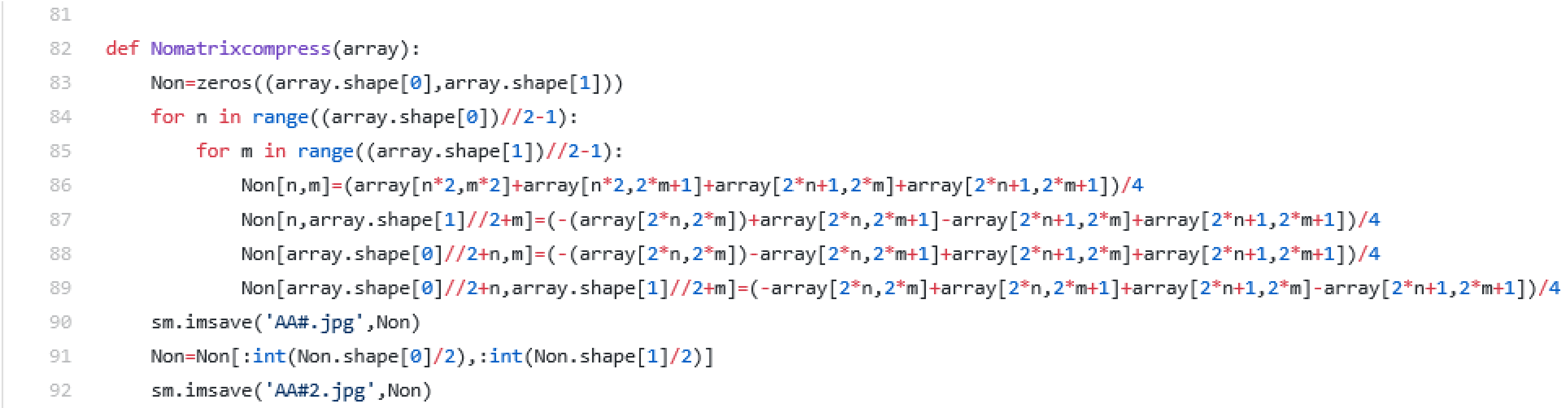
```
    return mn

def Revert(array):
    haararray=np.zeros((array.shape[0],array.shape[0]))
    for i in range(haararray.shape[0]):
        haararray[int(i/2),i]=(2**(1/2))/2
        haararray[-int(i/2)-1,-i-1]=-(2**(1/2))/2
    for i in range(haararray.shape[0]//2):
        haararray[-i-1,-2*i-1]=(2**(1/2))/2
    haararray1=np.zeros((array.shape[1],array.shape[1]))
    for i in range(haararray1.shape[1]):
        haararray1[int(i/2),i]=(2**(1/2))/2
        haararray1[-int(i/2)-1,-i-1]=-(2**(1/2))/2
    for i in range(haararray1.shape[1]//2):
        haararray1[-i-1,-2*i-1]=(2**(1/2))/2
    f=dot(np.transpose(haararray),dot(array,haararray1))
    sm.imsave('AAC.jpg',f)
    return print('hi')

def HaarIterate(array,t=1):
    for i in range(t):
        HaarWavelet(array)
        array=Converttoarray('aa.jpg')
    ab=Converttoarray('ab.jpg')
    ac=Converttoarray('ac.jpg')
    ad=Converttoarray('ad.jpg')
    m=column_stack((array,ab))
    n=column_stack((ac,ad))
    mn=vstack((m,n))
    return mn
```

Code

- Without

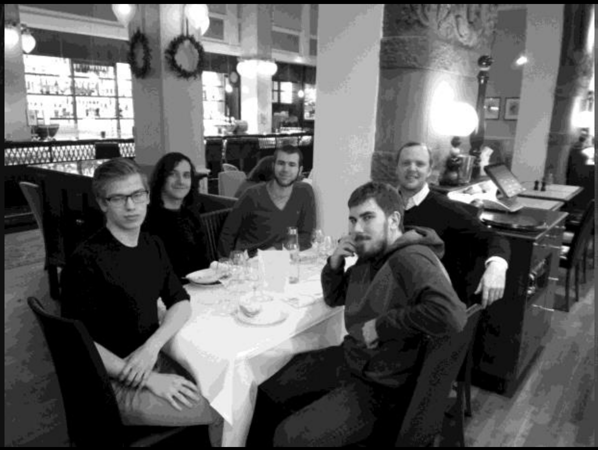


```

def Nomatrixcompress(array):
    Non=zeros((array.shape[0],array.shape[1]))
    for n in range((array.shape[0])//2-1):
        for m in range((array.shape[1])//2-1):
            Non[n,m]=(array[n*2,m*2]+array[n*2,2*m+1]+array[2*n+1,2*m]+array[2*n+1,2*m+1])/4
            Non[n,array.shape[1]//2+m]=(-(array[2*n,2*m])+array[2*n,2*m+1]-array[2*n+1,2*m]+array[2*n+1,2*m+1])/4
            Non[array.shape[0]//2+n,m]=(-(array[2*n,2*m])-array[2*n,2*m+1]+array[2*n+1,2*m]+array[2*n+1,2*m+1])/4
            Non[array.shape[0]//2+n,array.shape[1]//2+m]=(-array[2*n,2*m]+array[2*n,2*m+1]+array[2*n+1,2*m]-array[2*n+1,2*m+1])/4
    sm.imsave('AA#.jpg',Non)
    Non=Non[:int(Non.shape[0]/2),:int(Non.shape[1]/2)]
    sm.imsave('AA#2.jpg',Non)
```

Comp 1x

Original picture
40.1 KB
Compressed
19 KB
Cutaway
12 KB
Reverse
37 KB



Group
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Compressed
356 KB
Cutaway
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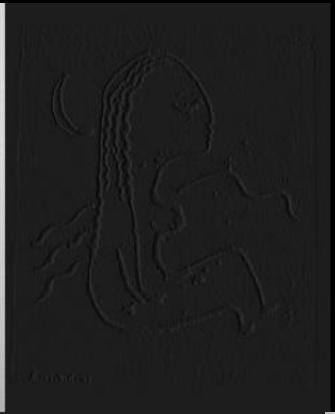
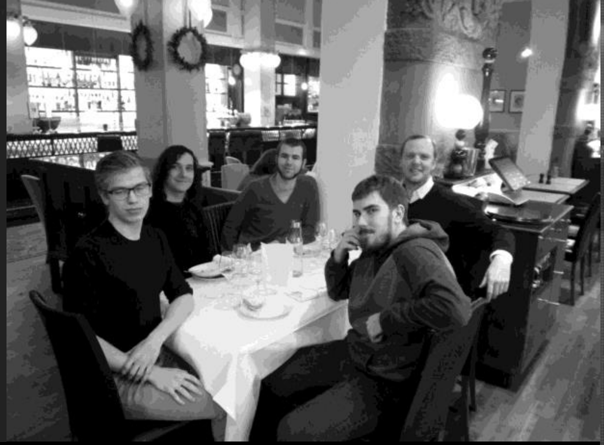
Reverse
5.07 MB





Original picture
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Compressed 2x
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Cutaway
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Reverse
30.9 KB

Group
764 KB
Compressed
122 KB
Cutaway
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Reverse
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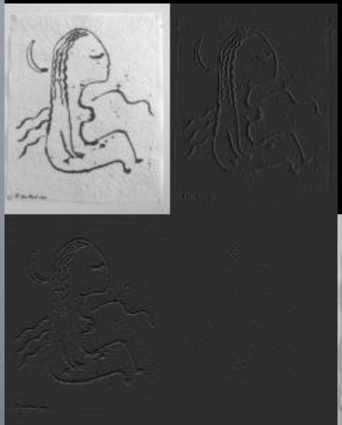

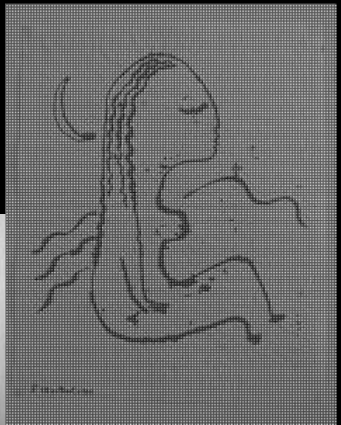

Comp 3x

Compressed 3x
2.67 KB
Cutaway
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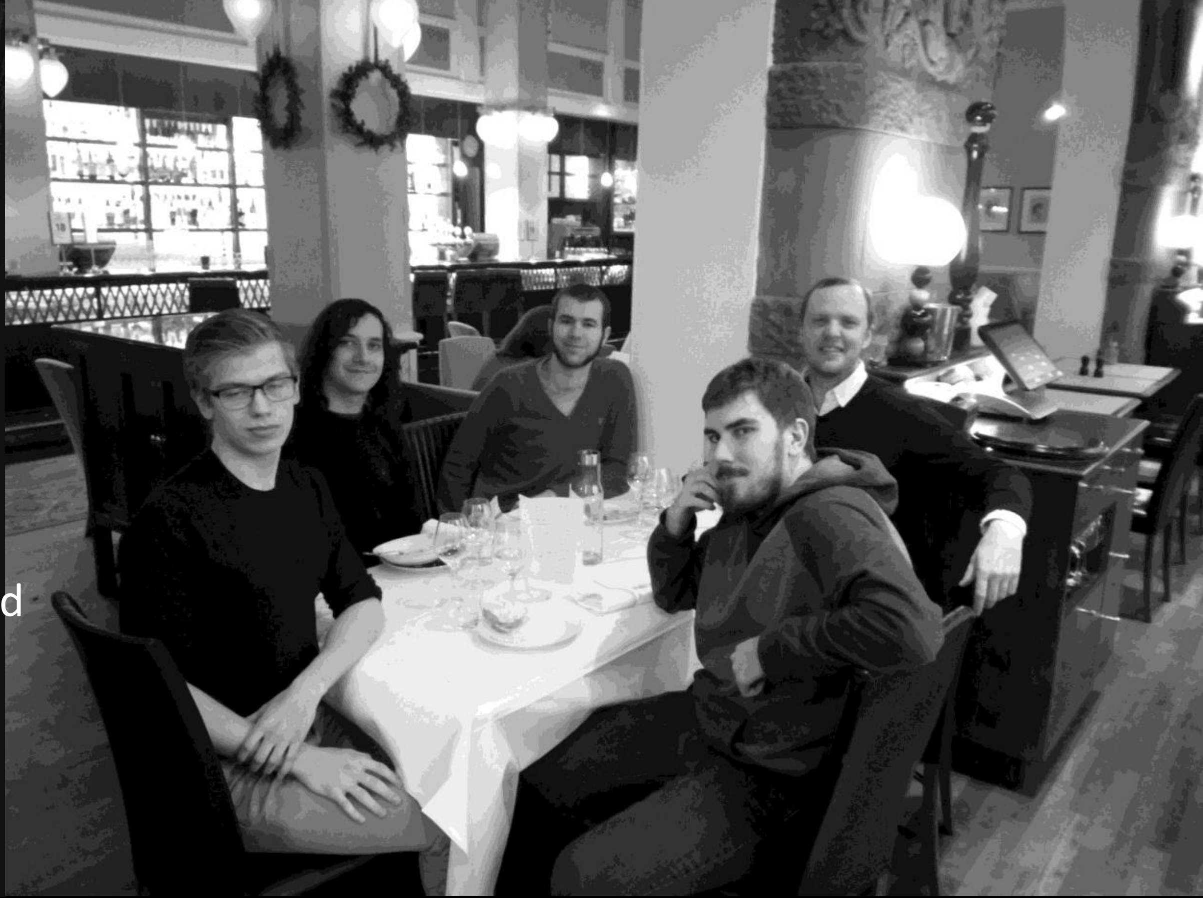
Reverse
8.12 KB

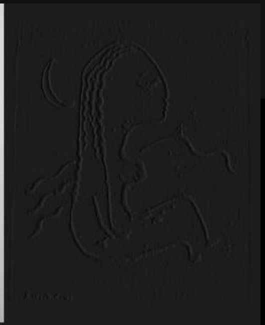
Group
Compressed
45.6 KB
Cutaway
29 KB
Reverse
338 KB

Comp without matrix

Compressed 1x
19.2 KB
Cutaway
12 KB

Group
Compressed
359 KB
Cutaway
225 KB





Without 2x

Kvinna
Compressed
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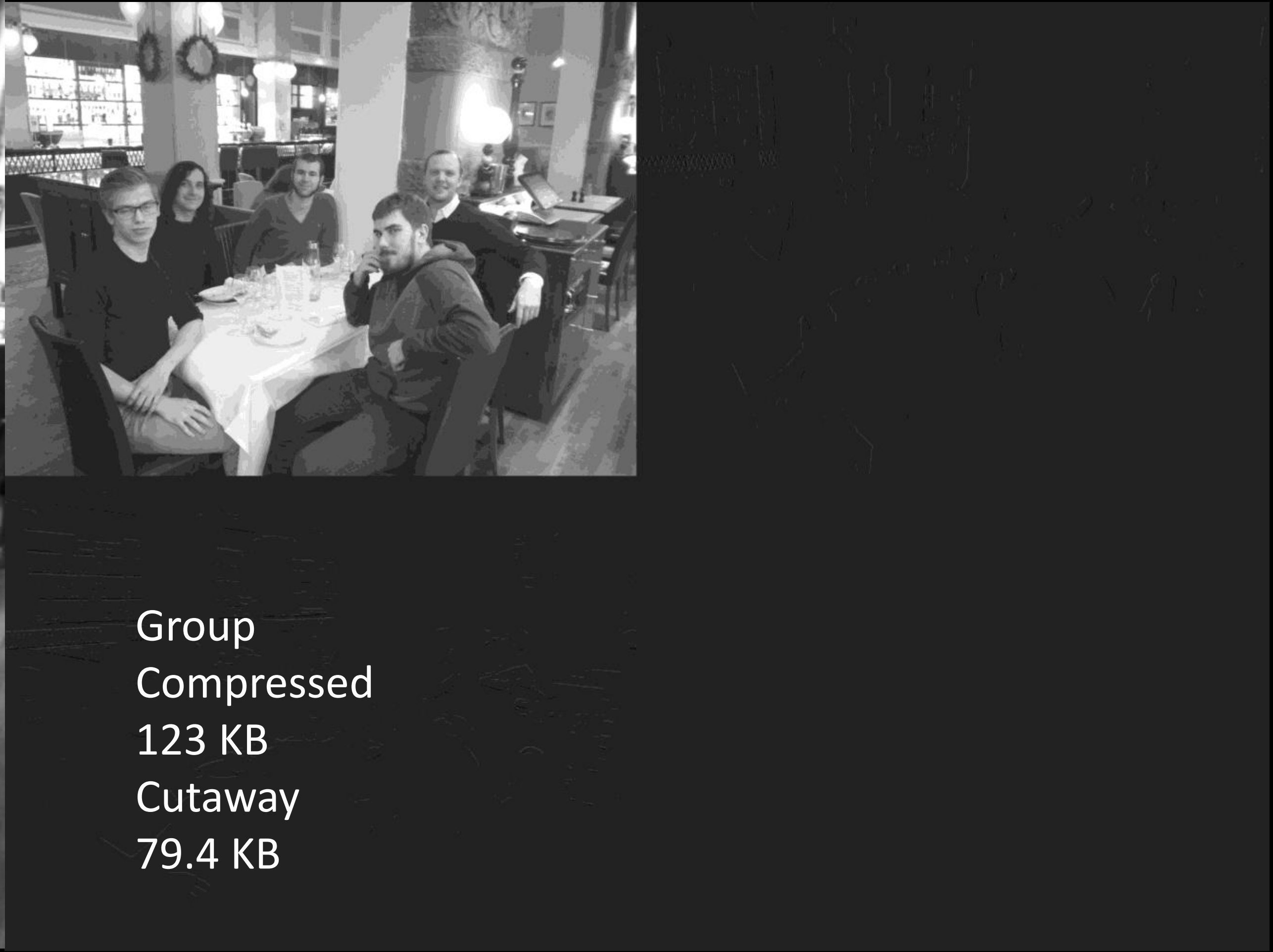
Cutaway
3.98 KB



Group
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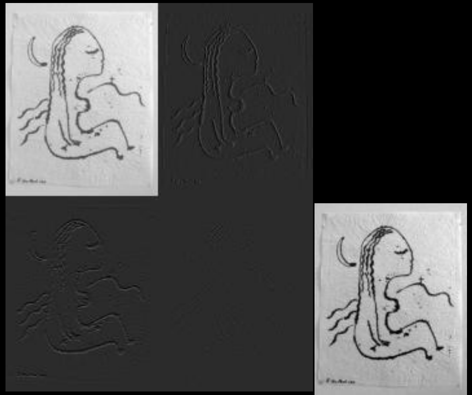

Without 3x

Kvinna
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Cutaway
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Group
Compressed
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Cutaway
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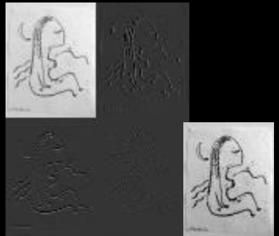

Time

- Difference
- Matrix
- Without Matrix

Method

- Mostly in group
- Divided the work

Demonstration time!!!!!!!!!!!!!