

WES 237B: Assignment 2 Report

Part 2: OpenCV

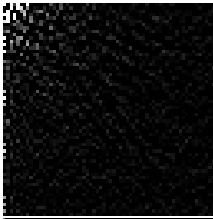
Original image:



Resized, Grayscale image:



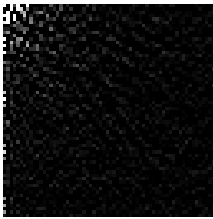
OpenCV DCT Results:



```
xilinx@pynq:~/jupyter_notebooks/WES_237B/lab2_dct$ time ./dct 1
Wrote opencv_dct.tif

real    0m0.757s
user    0m0.653s
sys     0m0.110s
```

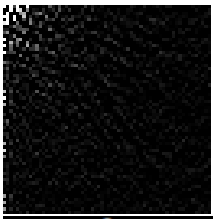
Naïve DCT Result:



```
xilinx@pynq:~/jupyter_notebooks/WES_237B/lab2_dct$ time ./dct 2
Wrote dct_lab_naive.tif

real    0m6.250s
user    0m6.114s
sys     0m0.130s
```

1D DCT Result:



```
xilinx@pynq:~/jupyter_notebooks/WES_237B/lab2_dct$ time ./dct 3
Wrote dct_lab_opt.tif

real    0m0.922s
user    0m0.766s
sys     0m0.163s
```