Discrete Cosine Transform (DCT)

Matlab Code:

clc;

clear all;

close all;

a1=imread('cam.png');

a=imresize(a1,[256 256]);

subplot(1,2,1)

imshow(a)

title('Original Image')

for i=1:8:256

for j=1:8:256

b=a(i:i+7,j:j+7);

b;

c=b;

d=dct2(c);

d1=d;

thr=max(d1)/10;

for k=1:1:8

for l=1:1:8

if d1(k,l)<thr

d1(k,l)=0;

elseif d1(k,l)>=thr

d1(k,l)=d1(k,l);

end

end

end

m(i:i+7,j:j+7)=idct2(d1);

m(i:i+7,j:j+7)=m(i:i+7,j:j+7);

end

end

m=uint8(m);

subplot(1,2,2)

imshow(m)

title('DCT Image')

h=mse(a,m);