BUTTERWORTH FILTER

clc

clear all

close

a=imread(image path);

a=double(a)

c=size(a)

N=c(1)

D0=30;m=4;*//cutoff freq*

for u=1:1:c(1)

for v=1:1:c(2)

D=((u-(N/2))^2+(v-(N/2))^2)^0.5

H(u,v)=1/(1+((D/D0)^(2\*m)))

end

end

vv=fft2(a)

vc=fftshift(vv)

x=vc.\*H

X=abs(ifft(x))

figure,imshow(uint8(a))

figure,mesh(H)

figure,imshow(uint8(255\*H))

figure,imshow(uint8(X))







