GAUSSIAN FILTER

clc

clear all

close

a=imread(‘any image’);

a=double(a)

c=size(a)

N=c(1)

D0=30;;*//cutoff freq*

for u=1:1:c(1)

for v=1:1:c(2)

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

D=Dx\*Dx

H(u,v)=exp(-D/(2\*D0\*D0))

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))

OUTPUT







