Advances in Computer Vision
Pset 2
Suman Nepal

PROBLEM 1

Image 1

Image 2

Box filter size = 9

Gaussian Filter, σ = 10

Both filters seems equally good in this particular set of images. But as box filter is not a proper low pass filter, we can find some high frequency spatial components in box filter hybrid. Usually gaussian filter is better because of its proper low passing property.

Low blurring just gives the image in image(B) as A- blur(A) almost cancel out. Almost converse is true for the high blurring as image B is mostly blurred and A- blur(A) dominates the picture.

PROBLEM 2

Gaussian Blurred Image (Low Frequency Component) σ = 8

High Frequency component (Einstein)

PROBLEM 3

Fig : Original Image

Figure : Gaussian Depth Blur

Fig : Binomial Depth Blur

PROBLEM 4:

Fig: Original Image

Fig : Reduced with to 60%

Original Figure