Lab 04 Hybrid Images

Laboratorio Vision por Computador
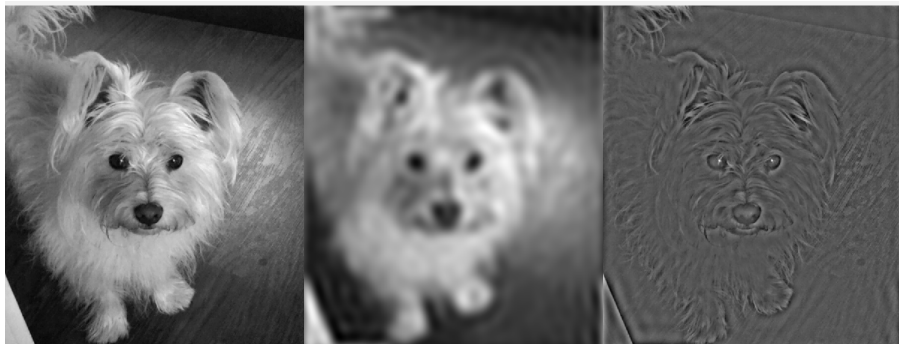
We talk about frecuencies, but visually what do they mean?

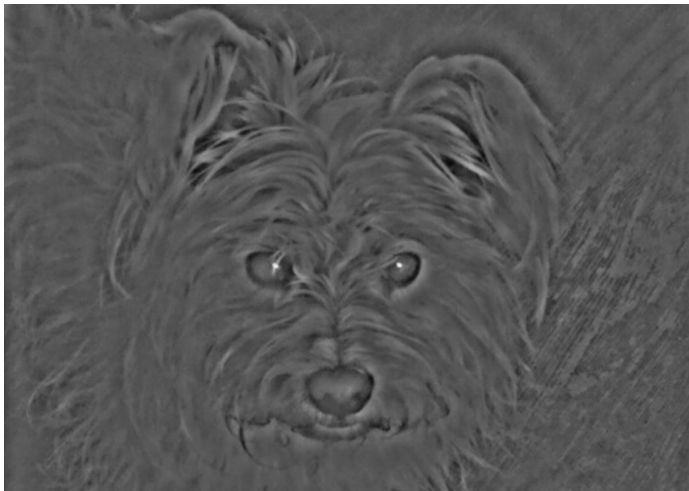High frequencies refers to pixel values that are rapidly changing in space

Low frequencies refers to pixel values that are slowly changing in space

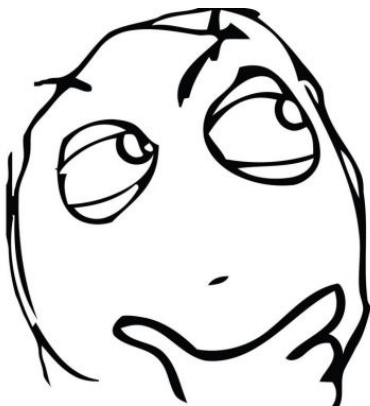If we add the low and high frequencies (in the frequency domain) we get the complete image

The farther away we are from the high frequency image the less we are able to see (details ar too small), and vice versa. (works ok on space domain)
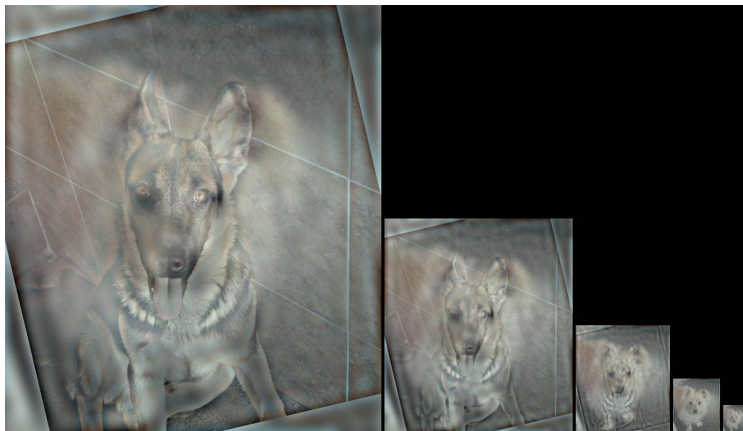
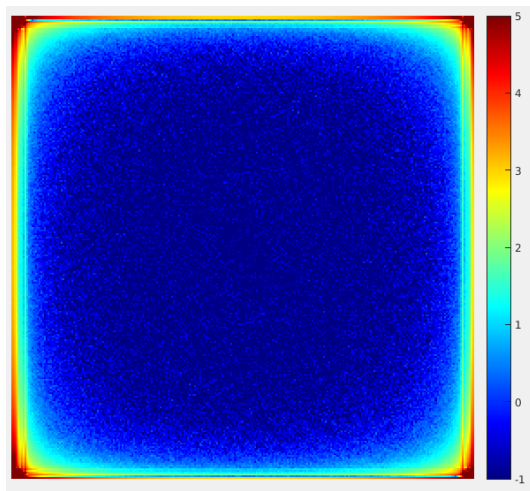The farther away we are from the high frequency image the less we are able to see (details ar too small), and vice versa

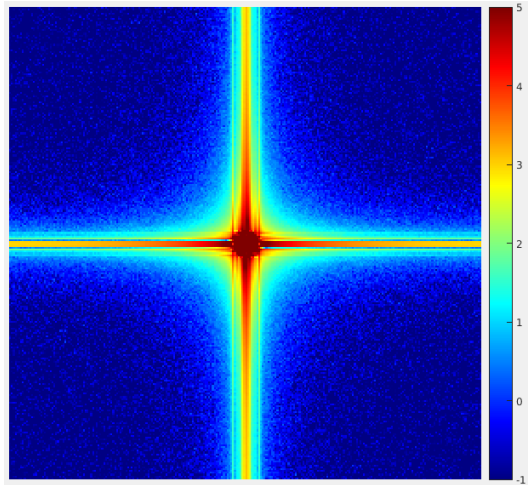What if we mix the high frequency information from two DIFFERENT images?

You are right, the closer we are the more we see the shepherd, the farther away we are the more we see the terrier.

A final advice

This is what a low frequency images looks after using MATLAB's fft2, notice anything funny?

fft2 output is shifted!, you might use 'fftshift', to center them.