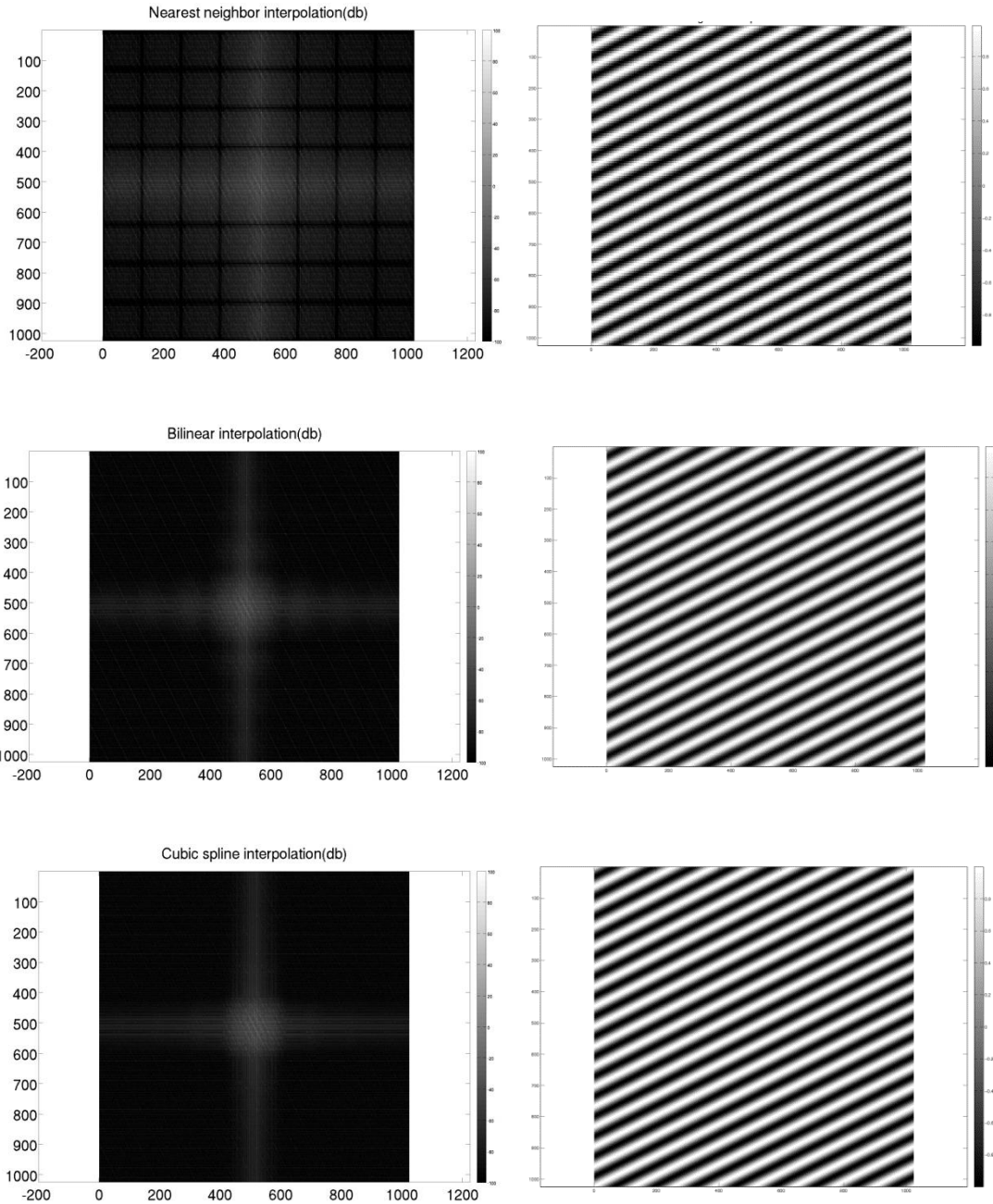


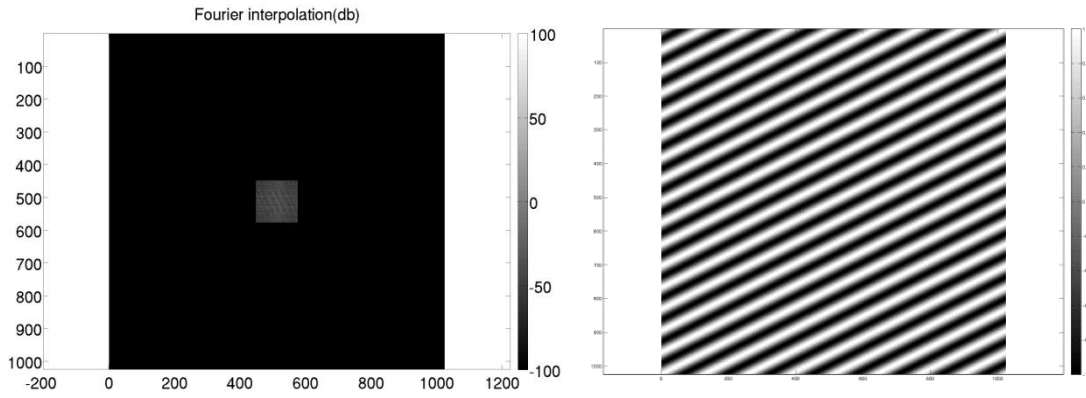
EE 257 Homework 6 Solutions by Ann Chen

Problem 1

We plot all spectrums in dB scale in order to see finer details. In all spectrum figures, zero frequency is at the center of the image. The figures on the right are the corresponding interpolated signals in the spatial domain.

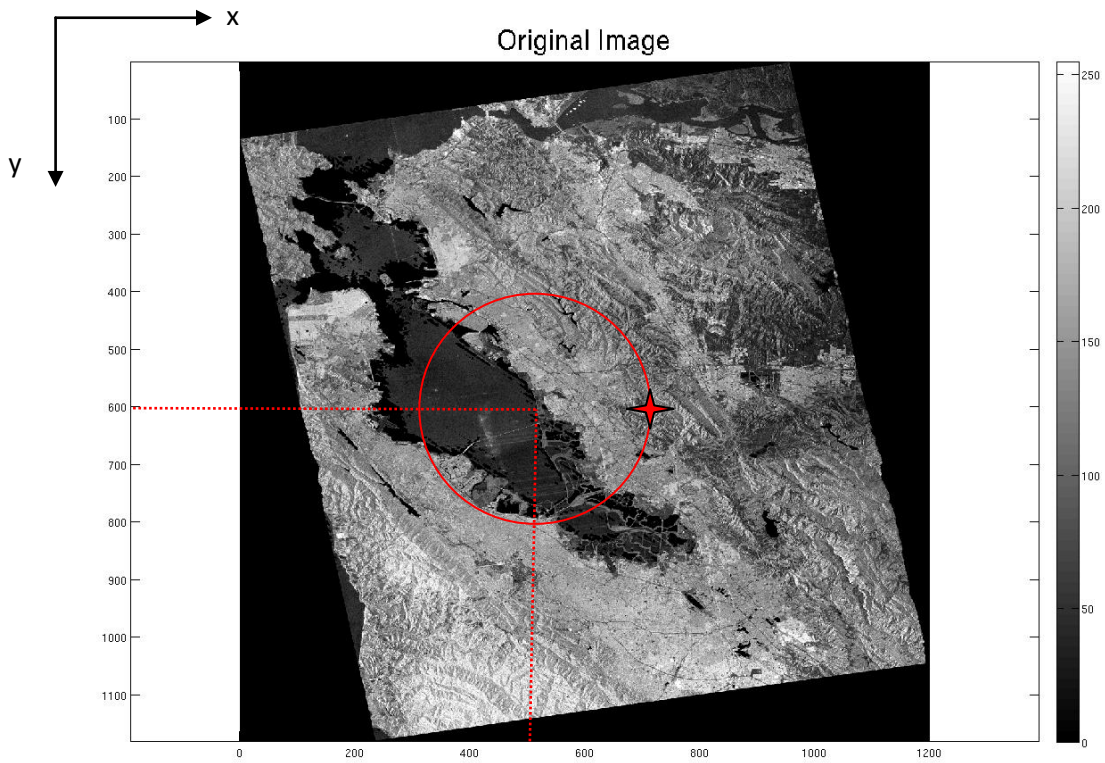


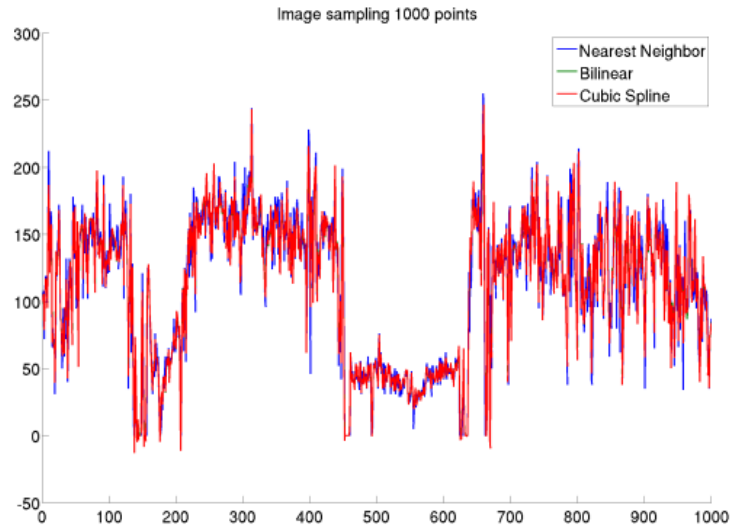
To implement Fourier method, simply padding zeros in the frequency domain.



Problem 2

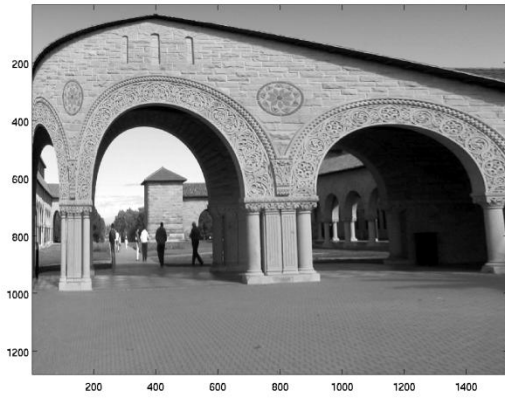
The sample path is illustrated as below. We draw circle [radius=200, centered at (600,500)] in the original image and our first sample is at the location of the star and proceed counter clockwise around the circle.





Problem 3

Distorted Image



Undistorted Image

