

CIS580 Problem Set 6

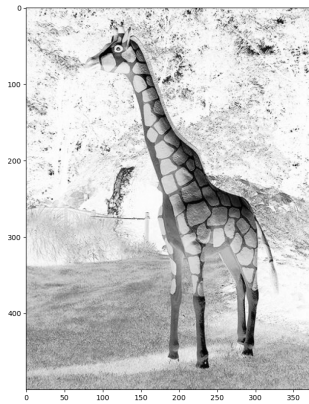
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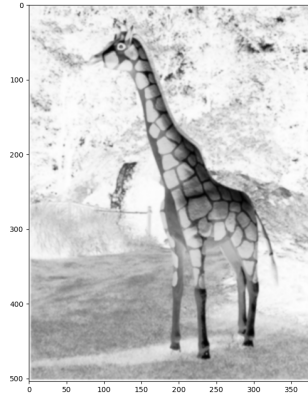
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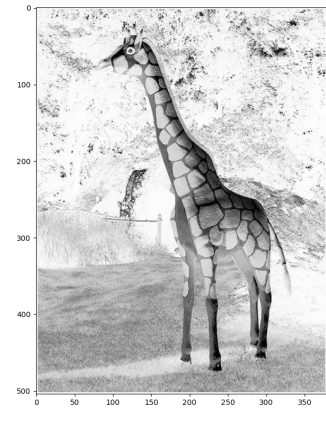
1 Convolution of image with a Gaussian



(a) Original Image



(b) $\sigma = 1$



(c) $\sigma = 0.1$

Figure 1: Three simple graphs

2 Convolution of Gaussians

3 Convolution of Step Edge with Gaussian derivative

4 Box Function

5 1D FFT Quiz

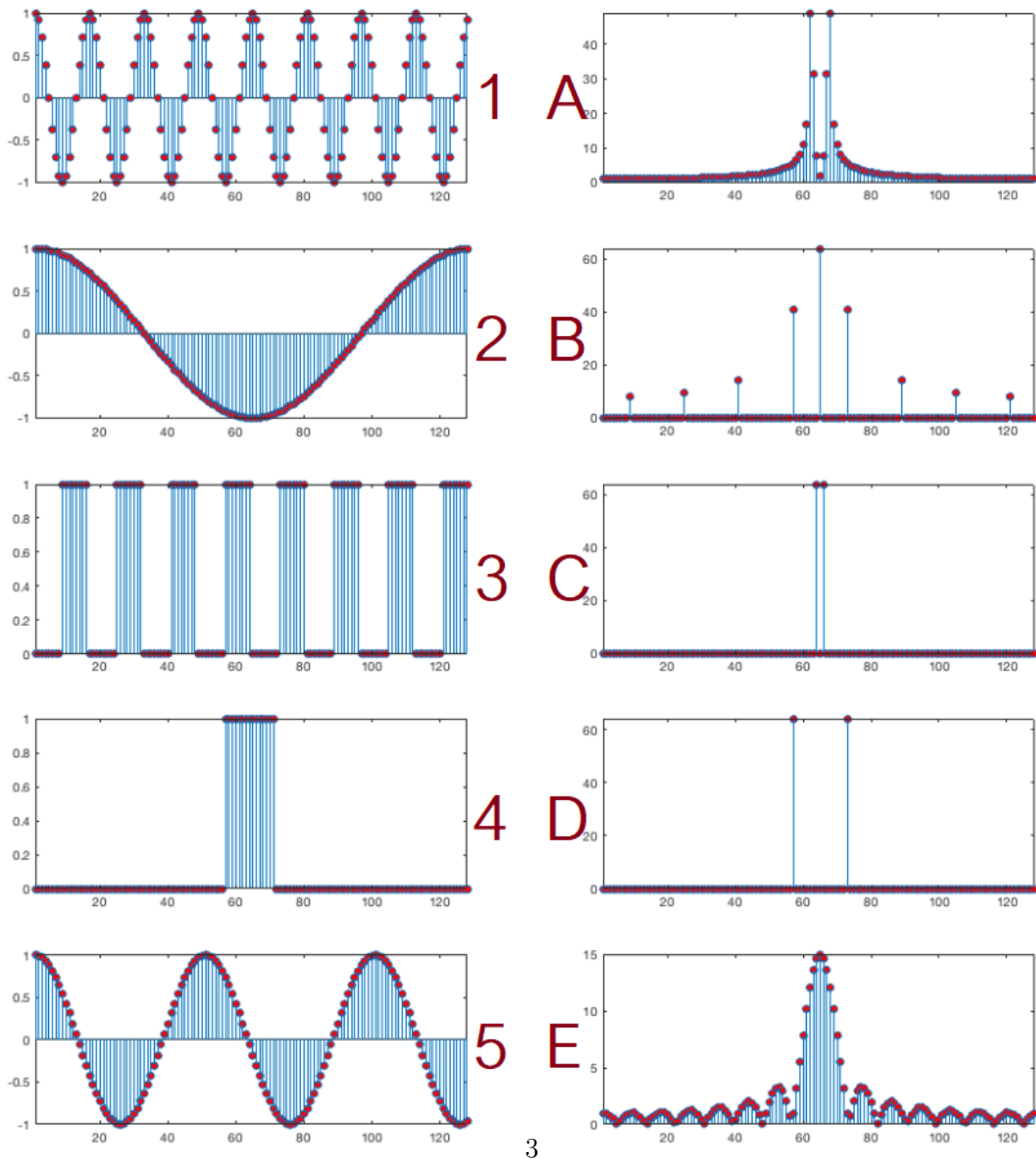


Figure 2: Functions and corresponding FFTs

6 2D Fourier Transform

7 Filter Design