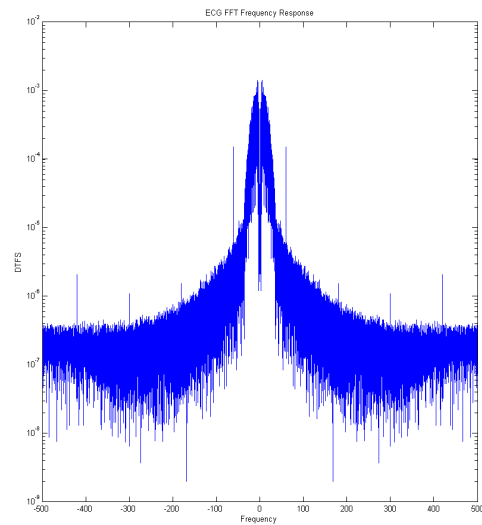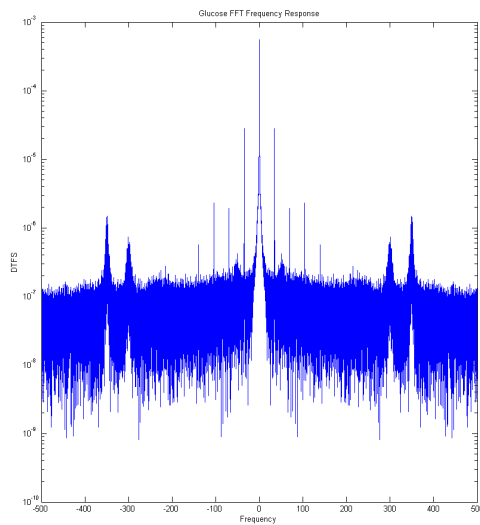# 6.s02: EECS II - From A Medical Perspective

Ryan Lacey <rlacey@mit.edu>

Collaborator(s): Jorge Perez

March 15, 2014

1. (a) Frequency spectrum of glucose and ECG signals.


```
N = length(xg0);

xg0fftUnshifted = fft(xg0)/N;
xe0fftUnshifted = fft(xe0)/N;

xg0fft = fftshift(xg0fftUnshifted);
xe0fft = fftshift(xe0fftUnshifted);

f = linspace(-500, 500*(1-1/N), N);

semilogy(f, abs(xg0fft));
xlabel('Frequency');
ylabel('DTFS');
title('Glucose FFT Frequency Response');

semilogy(f, abs(xe0fft));
xlabel('Frequency');
ylabel('DTFS');
title('ECG FFT Frequency Response');
```

(b) place