# Problem Set #8

#### Sarah Odeh - odesmodes

#### 1 Question 1

Opt Beta: [-1.191, 2.377] Std Errors: [0.349,0.452]

Cov Mat: [[0.121,-0.077],[-0.077,0.205]]

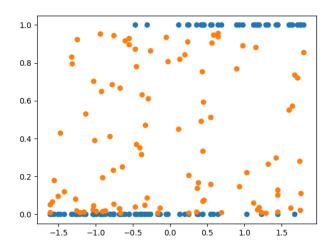


Figure 1: Plot of the logistic model and the answers (not really sure about this one)

### 2 Question 2

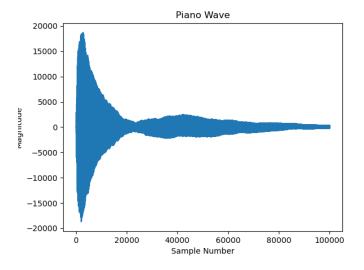


Figure 2: Part a, piano plot

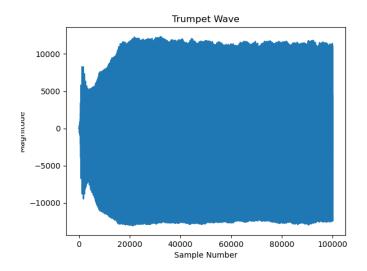


Figure 3: Part a, trumpet plot

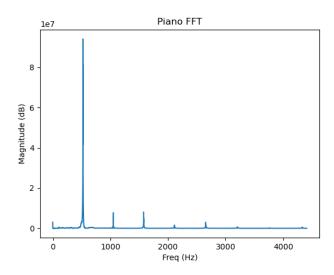


Figure 4: Part b, piano fft

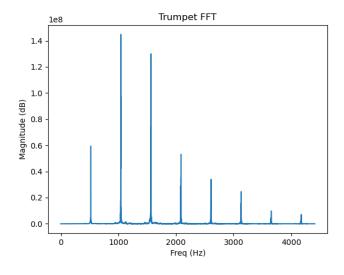


Figure 5: Part b, trumpet fft

## 3 Question 3

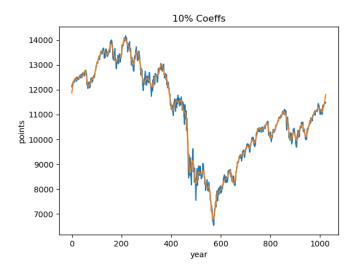


Figure 6: Parts a-d

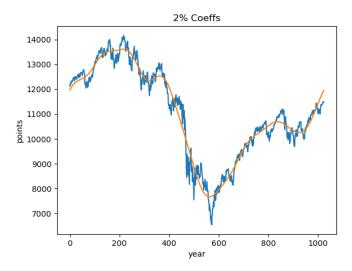


Figure 7: Part e