Computational Neuroscience Coursework 1

Dylan Cope (dc14470)

Question 1

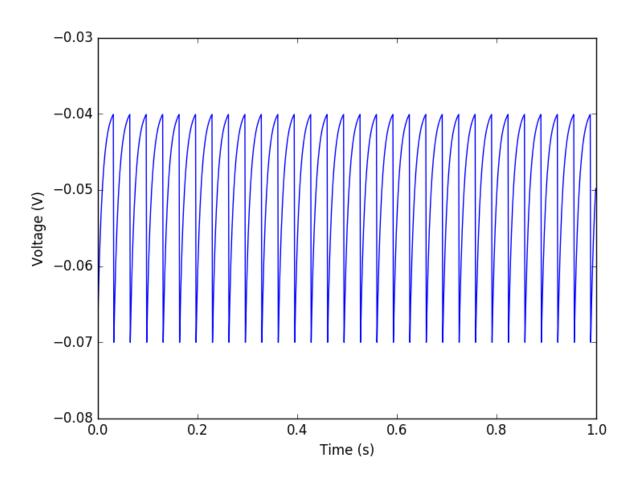


Figure 1: Internal neuron voltage against time for simulating a single neuron, showing thirty spikes over the course of $1~\rm s.$

Question 2

Question 3

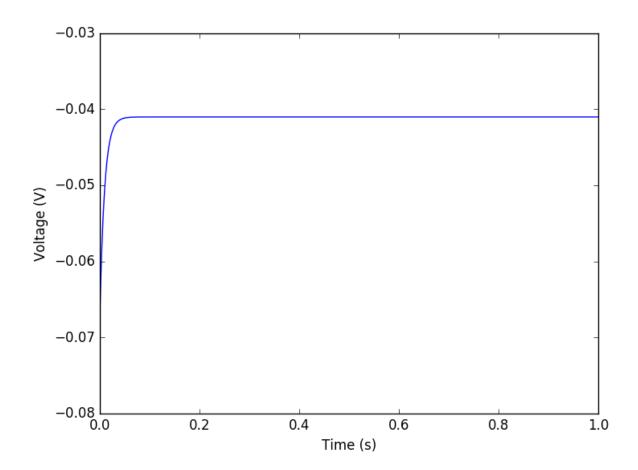
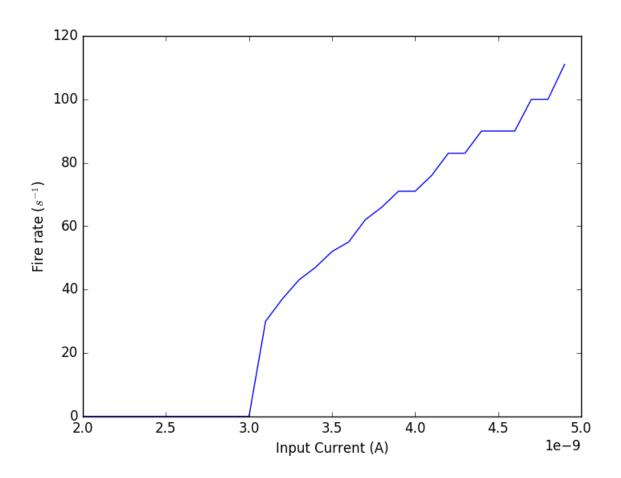


Figure 2: Simulation of a neuron for 1 s with an input current of amplitude I_e which is 0.1 [nA] lower than the minimum current computed in question 2.

Question 4



Question 5

Question 6

Question 7

References