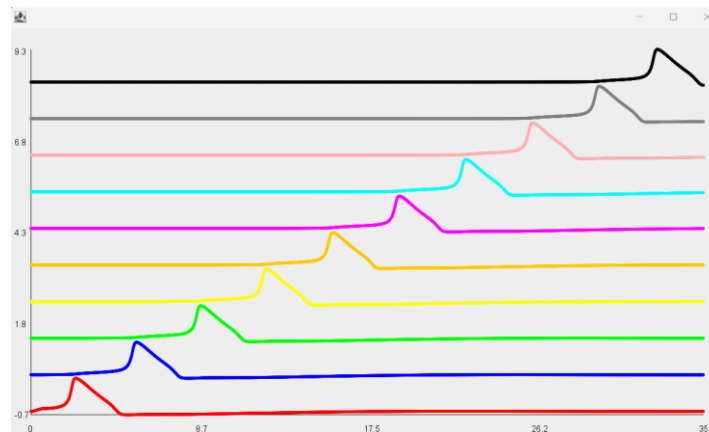


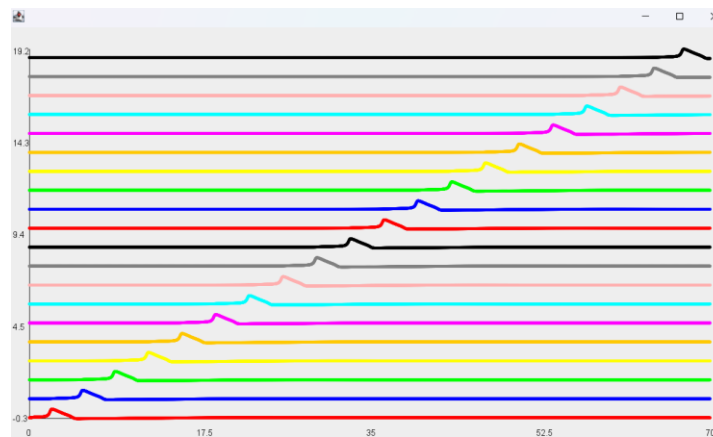
Benjamin Evans
CPSC 310
HW 5 Report
Prof Fietkiewicz
4/26/2023

1.

numNodes = 10



numNodes = 20



2.

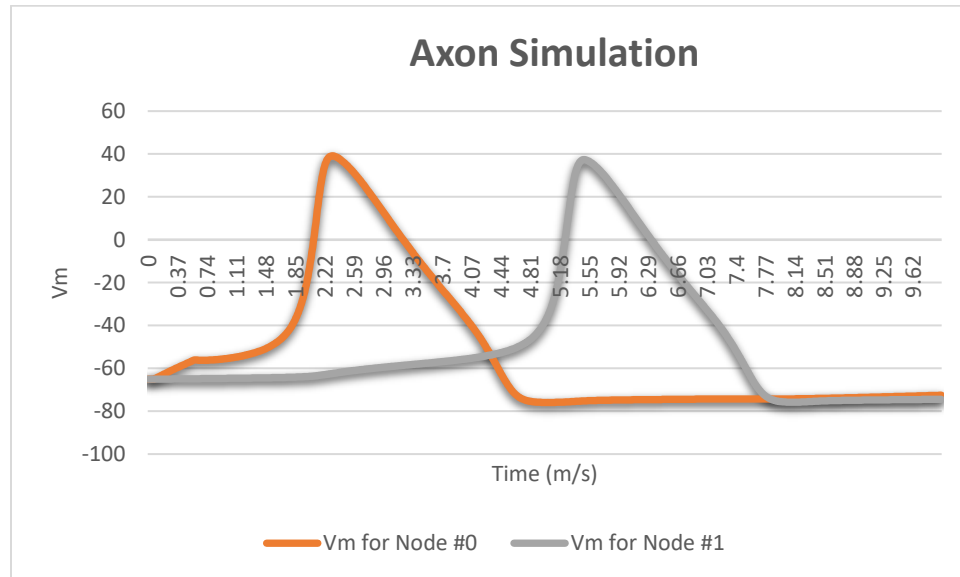
a.

Here are the first few lines of the output.csv file, which is in this zip file

Time	Vm for Node #0	Vm for Node #1
0	-65.00003243	-65.00003243

0.01	-65.00006366	-65.00006366
0.02	-65.00009376	-65.00009376
0.03	-65.00012277	-65.00012277
0.04	-65.00015074	-65.00015074
0.05	-65.00017773	-65.00017773
0.06	-65.00020376	-65.00020376

b.



3.

I could not get the grapher to graph the binary file correctly.

But I think I got it written to the file correctly.

4.

a. A possible advantage of implanting electrodes in the cortex is that it would allow for much more complex and flexible control over said prosthetic limb, as the signals can be processed by the brain before even being transmitted to the prosthetic limb. One advantage of connecting electrodes to peripheral axons in the arm is that the sensors can be more closely integrated with the prosthetic limb, which can provide a more natural feeling for the patient. This is due to the peripheral nerves provide much more direct contact between the limb and the brain, allowing for more precise and accurate control of movements and sensations.

b. The electrodes should be placed near to the peripheral axons instead of the cortex because the peripheral nervous system directly controls muscle movement and feeling. So, by stimulating the peripheral nerves directly, the electrodes can not inflict any problems or

5.

b.

C.

6.

