

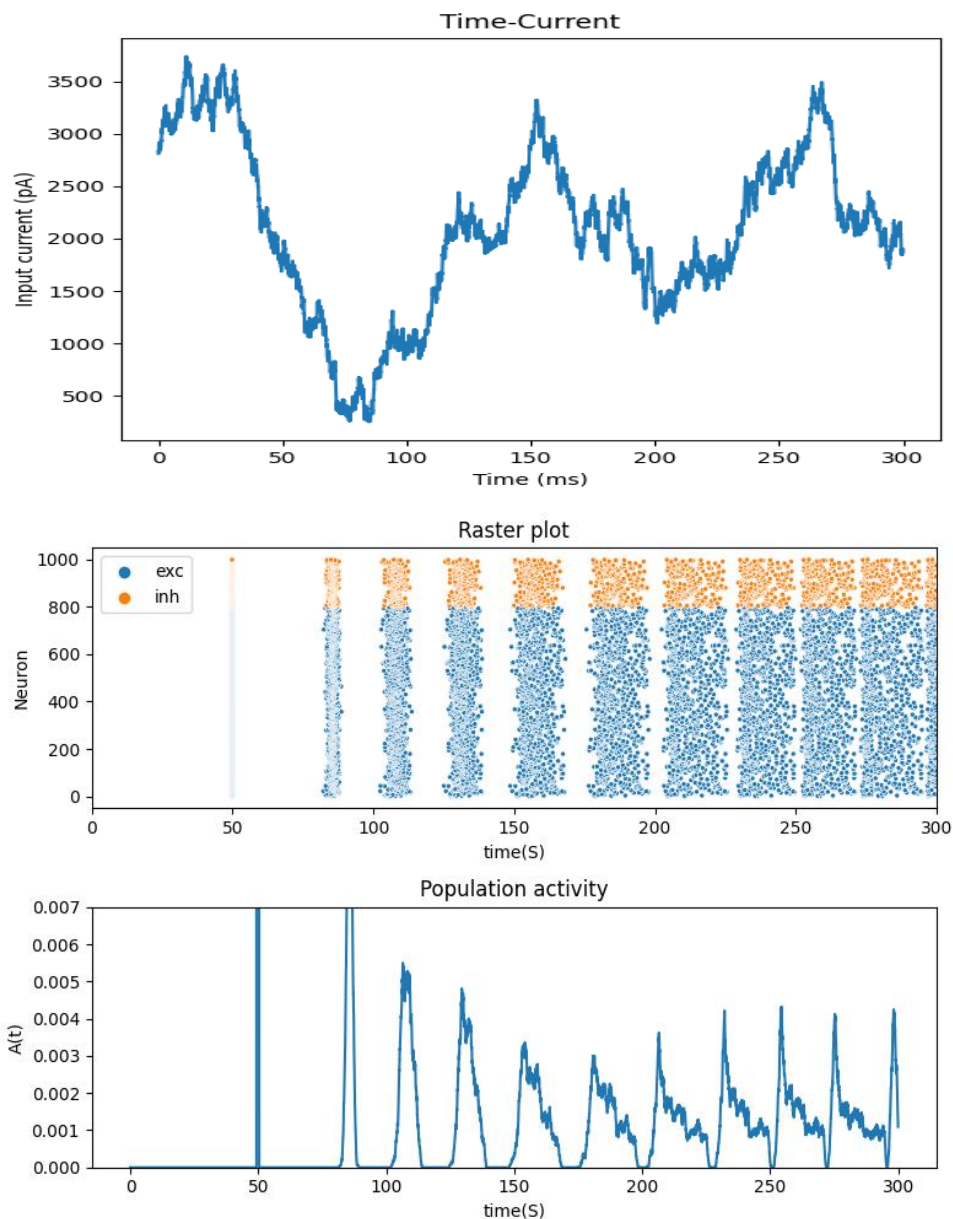
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Project 2 – Population Modeling

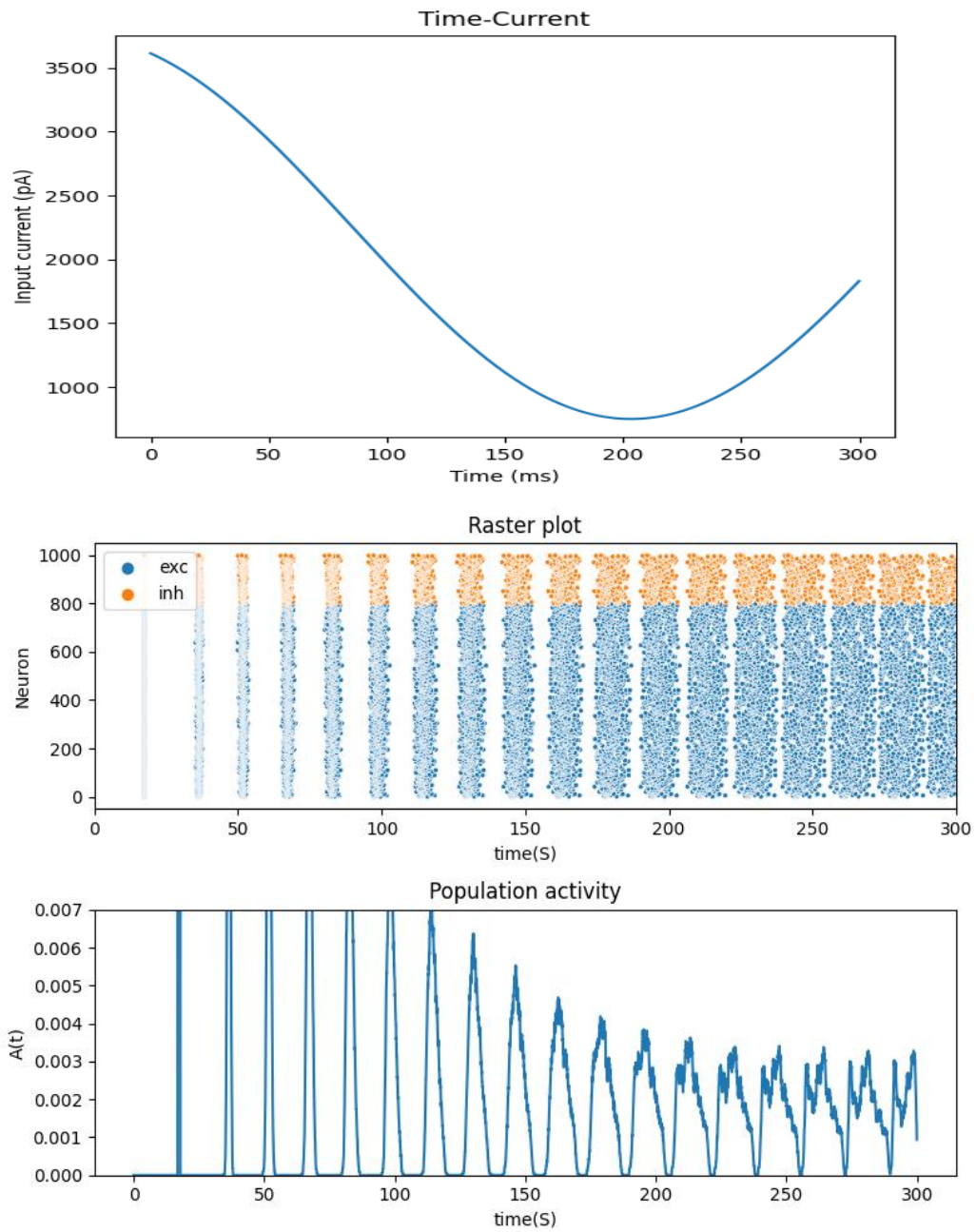
- 1-** Fully connected 800 excitatory and 200 inhibitory AELIF with the following config with $J=6.5$:

```
'dt=0.03125, R=10, tau=8, theta=-40, U_rest=-75, U_reset=-65, U_spike=5,  
ref_period=2, ref_time=0, theta_rh=-45, delta_t=2, a=0.01, b=500, tau_k=100'
```

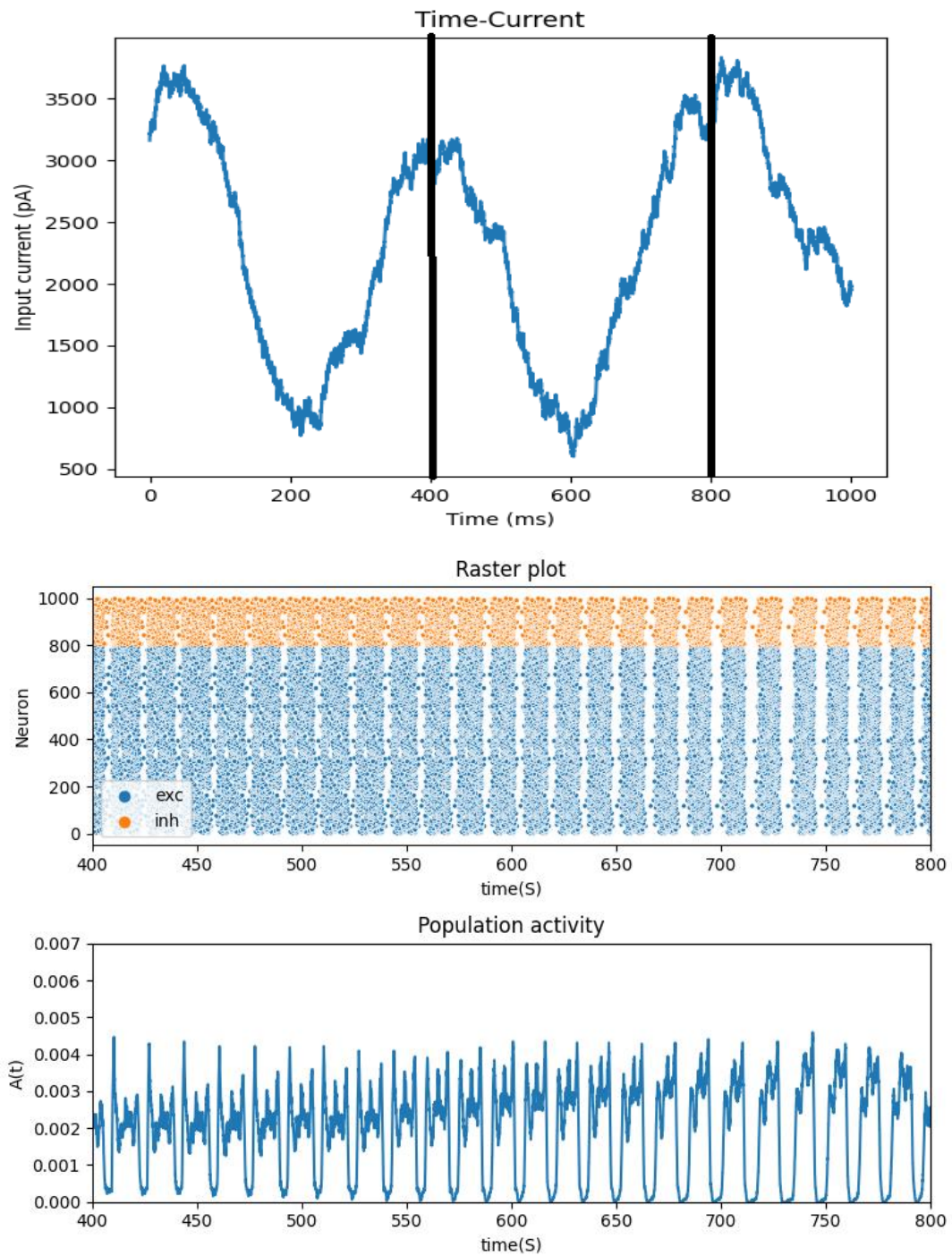
Test 1:



Test 2:



Test 3: similar to test 1 but 3 times the time.



1-

POP1: fully connected 800 excitatory and 200 inhibitory AELIF with the following config with $J=6.5$

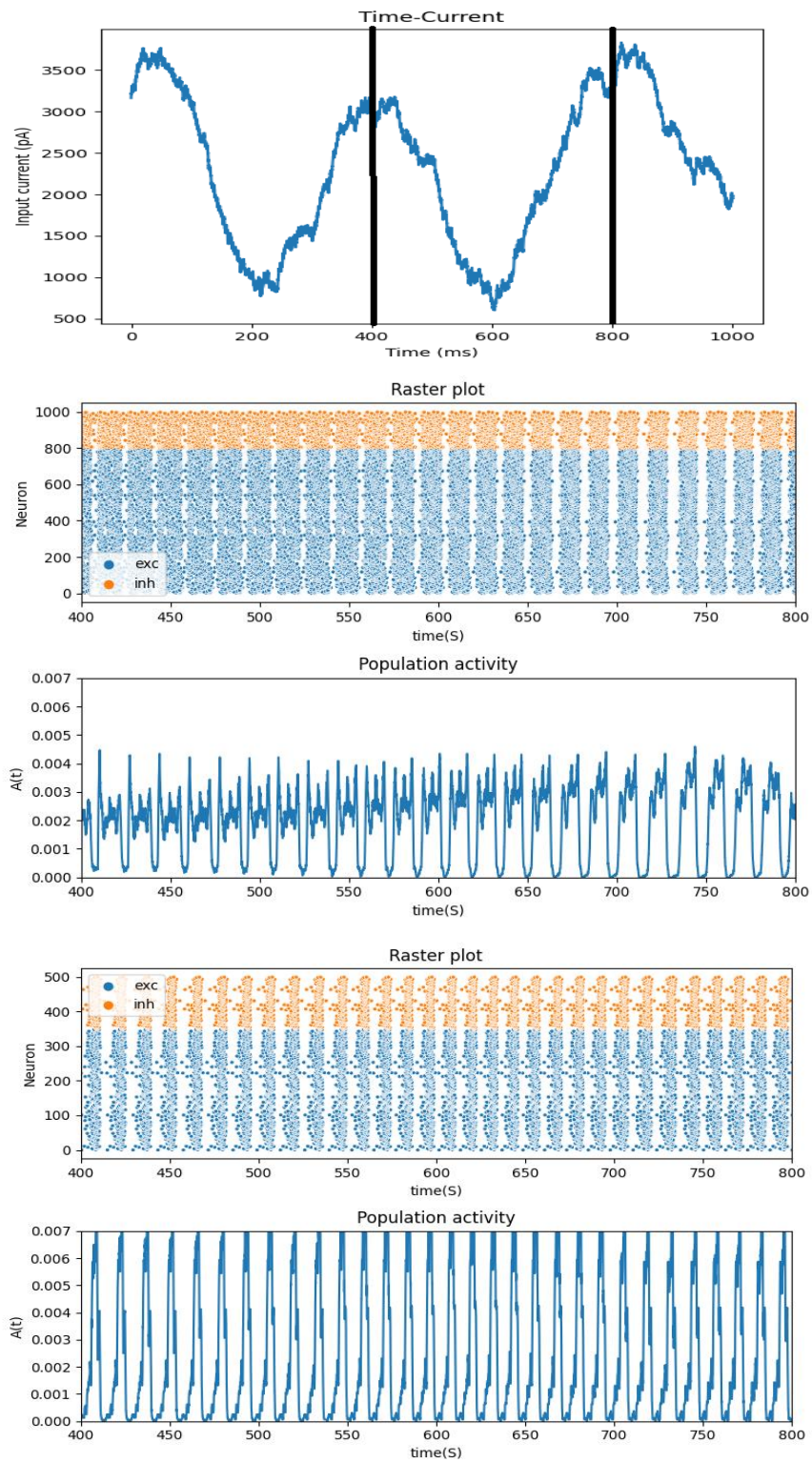
```
'dt=0.03125, R=10, tau=8, theta=-40, U_rest=-75, U_reset=-65, U_spike=5, ref_period=2, ref_time=0, theta_rh=-45, delta_t=2, a=0.01, b=500, tau_k=100'
```

POP2: fully connected 300 excitatory and 100 inhibitory LIF with the following config with $J=5.5$:

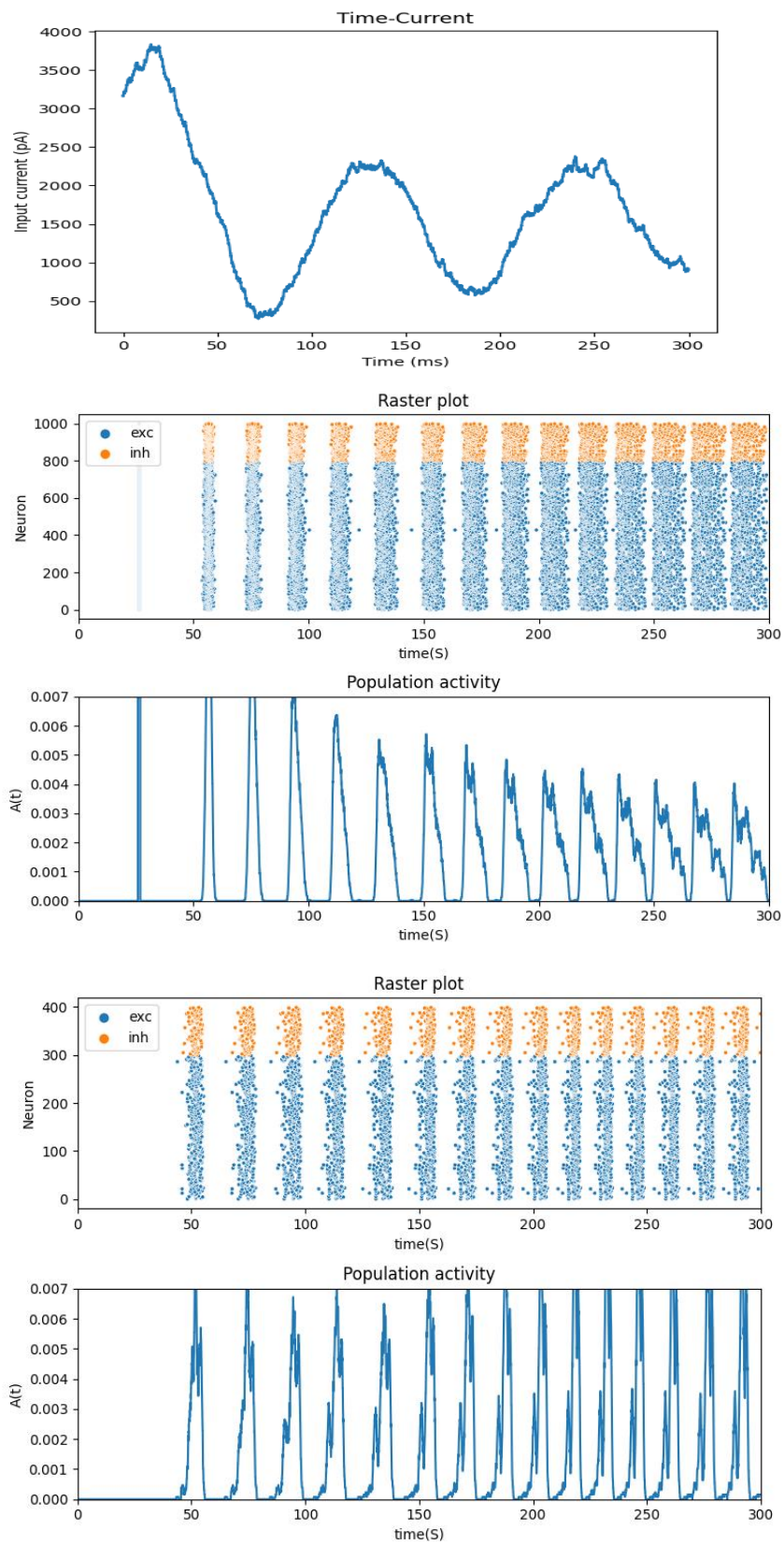
```
'dt=0.03125, R=10, tau=8, theta=-47, U_rest=-79, U_reset=-65, U_spike=5'
```

Pop1 is fully connected and directed to pop2 with $J=10$.

Test 1:



Test 2:



Test 3:

