Introduction to Neuro-Evolution

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2.1 A

Run avoidance.m with 10, 50, 100, and 500 epochs. What differences do you observe in the behaviour of the agents with respect to the number of training epochs?

2.2 B

Run avoidance.m in readFromFile mode. Make sure 'bestAdj.csv', 'bestW.csv', and 'bestThresh.csv' are in the same directory. The network specified by these files was trained until it reached an average performance of 950 frames of time survival. How does the behavior of this network compare to that of the networks you trained in part A?

2.3 C

Next we can modify some of the simulation parameters and observe the effects on learning as well as the pre-trained network. Set speed from .2 to .8. Repeat part A and B with speed at .8. Is there a change in the behavior of the pre-trained network? Is there a change in the behavior of the networks you are training? Hypothesize about what your observations mean when it comes to designing simulations for neuro-evolution