

Assignment 7

for NeuroComputing/ Theoretical Neuroscience 2014

1. Modify the program `som.m` to show a learning curve. To do this, define the distance between the cortical representation after learning for a certain number of trials and previous representations. Report your definition of distance and the corresponding learning curve in your report.

2. Modify the program `dnf.m` to simulate two simultaneous inputs with the same strength at $1/4 nn$ and $3/4nn$ and observe the network activity. Change the strength of one input and discuss the results. Include a plot of the time evolution of the neural field in your report as well as the your brief discussion of the results when varying the relative strength of the inputs.

Send a pdf file to prof6508@cs.dal.ca with subject line A7 by Wednesday, March 26, before 4pm.