Math 350, Spring 2023, Neural Gas Homework

- 1. (Problems 1 and 2 are to run app2 and app3) For the homework on the Neural Gas algorithm, upload the six files (app1.m, app2.m, app3.m, NeuralGasNetwork.m, NG-Data.mat, and PlotResults.m), and try to get app2.m and app3.m to run on Octave-online (or Octave at home).
- 2. (Problem 3) For the third problem, we'll be clusteing the obstacle course data as described in the course notes. In this case, there is a data file available for upload, obstacle1.mat. If you load it into Octave, you'll have a matrix A that is 1000×2 . To actually run the algorithm, I would suggest starting with app1.m and then edit it to match what you want to do here.

3. What to upload

When you're finished, upload copies of the script files you used (three of them), together with the final pictures of each clustering (either by exporting the files directly or by screenshot.

Our goal is to get a "good" clustering, which for now is something that looks right visually.

Due: Thur, Mar 30