Home Assignment 1\_Part 2 (5 points)

Due on: 11 pm, September. 25th, 2019

Late policy: late submission will **not** be marked (no matter what reason)!!!

# Description

To learn how to use the LMS and Newton’s method to train a single-layer network

# Requirement

* (2 points) Repeat the computer experiment mentioned in the class by using Least-mean-square algorithm, this time, however, positioning the two moons Figure to be on the edge of separability, that is, d=0. Determine the classification error rate produced by the algorithm over 2,000 test data points.
* (3 points) Select one classification dataset from UCI first. Then design a single-layer network trained by Newton’s method. Provide your testing accuracy on the selected dataset.
* The codes may upload to Moss(https://theory.stanford.edu/~aiken/moss/) to check the similarity. If high similarity rate is found, the assignment will be marked as zero. The instructor will also report it to the Departmental Chair for a further penalty.