Homework 5

April 13, 2018

Problem 1. Train a SVM architecture for the given two datasets. Code was provided for vizualizing the data.

1. Initially use inbuilt kernels of Matlab toolbox and tune the parameters for improving the accuracy.
2. Design a custom kernel function and classify the given datasets (eg. sigmoid).
3. Finally explain the disadvantage of SVM for more than 2 classes.

Problem 2. Train an LVQ network to classify points on the 2-D grid shown in the figure. The colors of the circles represent the class that the grid coordinate belongs to.