



University of Tehran
School of Electrical and Computer
Engineering



Pattern Recognition
Assignment 6

Due Date: 27th of Khordad

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In this assignment by means of Multi Layered Perceptron(MLP) and Radial Basis Function(RBF) you solve the problem of classification. You should submit the completed neural_net.py, mlp.ipynb and rbf.ipynb and answer the questions in the report file.

PROBLEM 1

In this problem, you should train an artificial neural network (MLP, MultiLayer Perceptron) for classification of Fashion-MNIST dataset. You should fill missing parts in given files. First, open mlp.ipynb with jupyter notebook, read the description and follow the instructions.

PROBLEM 2

Design a RBF classifier to discriminate digits. consider all 28×28 features with no feature conditioning. You should fill missing parts in given files. open rbf.ipynb with jupyter notebook, read the description and follow the instructions.