**PLA (Using Python)**

**Overview**

This project follows the description of the perceptron learning algorithm and shows that this learning algorithm can be used to classify the data points generated by uniform distribution.

**Repo contents**

* **training.py:** This file contains all the code to generate training data in required format and put it into a txt file called “train.txt”.
* **PLA.py:** This script file takes train.txt as input and then output the trained weight using PLA.

**Installation Dependencies:**

* Python 3.7
* Windows 10

**Included libraries**

* Numpy
* Random
* Matplotlib
* re

**How to Run?**

1. Run training.py and type w0, w1, w2, m, n (use space or comma or other Separator symbol to separate the input)
2. Run PLA.py

**References**

[1] note\_02\_perceptron.pdf, Prof. Yanni Sun