## **DSP Homework 1**

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**Testing Environment : CSIE workstation(gcc 8.2)** 

## How to execute:

To generate executable files (train and test):

\$ make

To execute "train" file:

\$ ./train iteration model init.txt seg model 0?.txt model 0?.txt

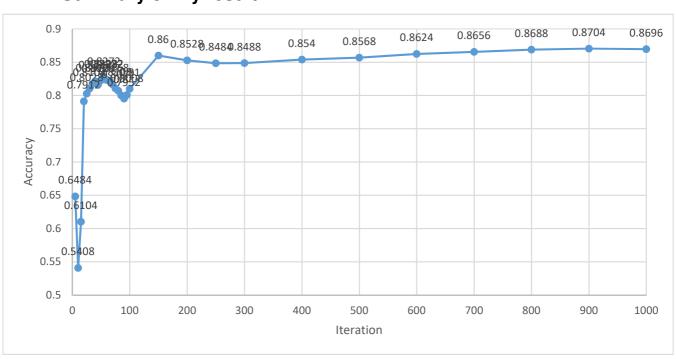
To execute "test" file:

\$ ./test modellist.txt testing\_data.txt result.txt

To remove executable files:

\$ make clean

## Summary of my result:



我最終選擇的 iteration 為 900 (accuracy = 0.8704)。

如上圖,從 iteration 數與 accuracy 的關係圖我們可以發現,

accuracy 並非完全與 iteration 成正比,大約在 iteration = 10,90 等 處為相對低點(陡降)。而當 iteration 夠大時(>300),accuracy 呈現 緩慢、穩定成長的趨勢(在 iteration = 900~1000 時又再度下降)。

註:採樣數:

Iteration 1~100 => 5 的倍數採樣

Iteration 100~300 => 50 的倍數採樣

Iteration 300~1000 => 100 的倍數採樣