

Training process: using TA's script

difference between previous version	accuracy
baseline	0.7414
10 iteration(first for loop in 03_training.sh)	0.7693
9 states	0.9125
3 gaussian mixtures	0.9304
4 gaussian mixtures	0.9367
5 gaussian mixtures	0.9407
6 gaussian mixtures	0.9396
8 gaussian mixtures change the mixture number in state 2-8	0.9315
5 gaussian mixtures change the mixture number in state 2-9	0.9407
10 iteration(all for loop in 03_training.sh)	0.9430
15 iteration(all for loop in 03_training.sh)	0.9373
11 states 10 iteration(all for loop in 03_training.sh)	0.9661
change the mixture number in state 1-5 for digit 0-5 change the mixture number in state 6-10 for digit 6-10	0.9522
7 gaussian mixtures change the mixture number in state 2-9	0.9614
9 gaussian mixtures change the mixture number in state 2-10	0.9638
15 states	0.9701
change the mixture number in state 2-14	0.9735

Variables:

1. Number of states
  - a. the most effective parameter to improve the result
2. Number of gaussian mixtures
  - a. not affect result a lot
  - b. the value don't need to be too big to get the best result
3. Number of iterations
  - a. in 03\_training.sh
  - b. the value don't need to be too big to get the best result
4. Change the gaussian number from state i to j
  - a. e.g., i = 2, j = 4, MU 2 {san.state[2-4].mix}
  - b. for every output symbol, use min i and max j is probably the best