## National Taiwan University

# Digital Speech Processing: Report #2

#### EE2 b03901016 **Hao Chen**

May 5, 2016

#### 1 Introduciton

Using HTK toolkit (HCompV, HCopy, HHed, HERest...) to build the HMM models of continuous signal and test the accuracy.

#### 2 Environment

• OS : Linux mint 17.2 Rafaela

• Kernel: x86\_64 Linux 3.16.0-38-generic

 $\bullet$  Shell : zsh 5.0.2

### 3 Steps

- 1. Run all shellscripts
  ( 00\_clean\_all.sh, 01\_run\_HCopy.sh, 02\_run\_HCompV.sh, 03\_training.sh, 04\_testing.sh )
- 2. Check accuracy in /result if it's 74.34
- 3. Change the data in "proto" to increase states and "mix2\_10.hed" to increase Gaussian mixtures.
- 4. Maximize the accuracy.

#### 4 Result

After running all the five shellscripts, I just change the number of states to 10, and increase the number of Gaussian mixtures to 12, then I get the accuracy "95.97".

I found that the number of iteration does not effect a lot, so I didn't optimize it.