1. **Train two standard GMM-HMM based Automatic Speech Recognition recognizers.**
   With Acoustic features only
   With acoustic and articulatory (additional) features as observations.

The tool I used is HTK3.4.1, to add additional features, you need to read/write HTK files, HTKRW.py can be used for this.
You can refer the standard.pdf and 39D0/models/Acousticnew.py (more GMMs) how to build the recognizers.

2. **Use forced alignment to get the HMM hidden states for DNN training.**
3. **Count the occurrences of hidden states in the training set to compute the prior probabilities of HMM states.**

I used Julius. You can get code for this from julius.ipynb

4. **Train teacher DNN classifier**
5. **Get soft targets from teacher model**
6. **Train student DNN classifier.**
7. **Test**

   M2MGRU.py is how the DNN model is built (it is RNN, you can remove the RNN layers)/
   M2MTrain.py is how the model is trained
   M2MASR.py is about recognizing phoneme
   More details, see distillation0.zip