#### TTS:

## https://github.com/JasonWei512/Tacotron-2-

Chinese/tree/deb9add0b6abc27b07b69bf86969a1c6d1a1ca5b

### Dataset requirement (for training):

- 1. .wav files are required for the data set.
- 2. transcription of the wav file
- 3. .interval file for indicating all starts and stops of pronunciation
- 4. a .txt file for mapping of all resources

```
000001
          卡尔普#2陪外孙#1玩滑梯#4。
     ka2 er2 pu3 pei2 wai4 sun1 wan2 hua2 ti1
         假语村言#2别再#1拥抱我#4。
000002
     jia2 yu3 cun1 yan2 bie2 zai4 yong1 bao4 wo3
         宝马#1配挂#1跛骡鞍#3, 貂蝉#1怨枕#2董翁榻#4。
     bao2 ma3 pei4 gua4 bo3 luo2 an1 diao1 chan2 yuan4 zhen3 dong3 weng1 ta4
          邓小平#2与#1撒切尔#2会晤#4。
     deng4 xiao3 ping2 yu3 sa4 qie4 er3 hui4 wu4
          老虎#1幼崽#2与#1宠物犬#1玩耍#4。
000005
     lao2 hu3 you4 zai3 yu2 chong3 wu4 quan3 wan2 shua3
          身长#2约#1五尺#1二寸#1五分#2或#1以上#4。
000006
     shen1 chang2 yue1 wu2 chi3 er4 cun4 wu3 fen1 huo4 yi3 shang4
000007
        赵荻#2约#1曹云腾#2去#1鬼屋#4。
    zhao4 di2 yue1 cao2 yun2 teng2 qu4 gui3 wu1
         - 思ロロ4 早生05 - 思早 04 ±0年04
```

Figure 1. capture of '000001-010000.txt',

```
3 000001.interval 3 3 li new 1 3 li new 1
      File type = "ooTextFile"
      Object class = "TextGrid"
     2.66
      <exists>
      "IntervalTier"
      "000001.interval"
 10
     0
 11
     2.66 audio length
      numb of interval
start of 'si1'
      17
 13
      0.27958612055419324
"sil" interval word
                                 end of 'si1' (in seconds)
 14
 15
      "sil"
      0.27958612055419324
 16
      0.406291189066745
 18
      "k"
 19
      0.406291189066745
 20
      0.5165142974475827
      "a2"
      0.5165142974475827
 22
 23
      0.6143759357296349
      "er2"
      0.6143759357296349
      0.743141249258651
      0.743141249258651
 29
      0.8997198705099344
 30
      "u3"
     0.8997198705099344
     0.9749188136108798
 32
33 "p"
```

Figure 2. an example of an interval file

## Data-preprocess:

Add padding to ensure all input share equal length Recording true length (all non-padding value)

Convert all .wav file to numpy expression

#### Train:

Provide the data, [x:sentence label,y:numpy list].

#### Evaluate:

See example in the Colab notebook

## Colab Notebook

https://colab.research.google.com/drive/1dEZtktOnY-QgIJc7XinzrXrPkyIKqx-E?usp=sharing (if you get access denied from reaching the notebook, just open it in incognito mode)

For the environment used,
You may check it with
!pip list
In the notebook

# For Cantonese version:

Same requirement for the dataset:

.wav

.interval with timestamp

.txt for mapping

#### Potential source for dataset:

http://compling.hss.ntu.edu.sg/hkcancor/ https://github.com/liesenf/MYCanCor