Myprosody

Example usage

Gender recognition and mood of speech: Function *myspgend(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspgend(p,c)

[] a female, mood of speech: Reading, p-value/sample size= :0.00 5
```

Pronunciation posteriori probability score percentage: Function *mysppron(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.mysppron(p,c)

[]Pronunciation_posteriori_probability_score_percentage= :85.00
```

Detect and count number of syllables: Function *myspsyl(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspsyl(p,c)

[]number_ of_syllables= 154
```

Detect and count number of fillers and pauses: Function *mysppaus(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.mysppaus(p,c)

[]number_of_pauses= 22
```

Measure the rate of speech (speed): Function *myspsr(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspsr(p,c)

[]rate_of_speech= 3 # syllables/sec original duration
```

Measure the articulation (speed): Function *myspatc(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspatc(p,c)

[]articulation_rate= 5 # syllables/sec speaking duration
```

Measure speaking time (excl. fillers and pause): Function *myspst(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspst(p,c)

[]speaking_duration= 31.6 # sec only speaking duration without pauses
```

Measure total speaking duration (inc. fillers and pauses): Function *myspod(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspod(p,c)

[]original_duration= 49.2 # sec total speaking duration with pauses
```

Measure ratio between speaking duration and total speaking duration: Function *myspbala(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspbala(p,c)

[]balance= 0.6 # ratio (speaking duration)/(original duration)
```

Measure fundamental frequency distribution mean: Function *myspf0mean(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0mean(p,c)

[]f0_mean= 212.45 # Hz global mean of fundamental frequency distribution
```

Measure fundamental frequency distribution SD: Function *myspf0sd(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0sd(p,c)

[]f0_SD= 57.85 # Hz global standard deviation of fundamental frequency
distribution
```

Measure fundamental frequency distribution median: Function *myspf0med(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0med(p,c)

[]f0_MD= 205.7 # Hz global median of fundamental frequency distribution
```

Measure fundamental frequency distribution minimum: Function

myspf0min(p,c)

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0min(p,c)

[]f0_min= 77 # Hz global minimum of fundamental frequency distribution
```

Measure fundamental frequency distribution maximum: Function

myspf0max(p,c)

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0max(p,c)

[]f0_max= 414 # Hz global maximum of fundamental frequency distribution
```

Measure 25th quantile fundamental frequency distribution: Function

myspf0q25(p,c)

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0q25(p,c)

[]f0_quan25= 171 # Hz global 25th quantile of fundamental frequency distribution
```

Measure 75th quantile fundamental frequency distribution: Function

myspf0q75(p,c)

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)

mysp.myspf0q75(p,c)

[]f0_quan75= 244 # Hz global 75th quantile of fundamental frequency distribution
```

Overview: Function *mysptotal(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)


mysp.mysptotal(p,c)
```

```
number_ of_syllables     154
number_of_pauses          22
rate_of_speech             3
articulation_rate          5
speaking_duration       31.6
original_duration       49.2
balance                  0.6
f0_mean               212.45
f0_std                 57.85
f0_median              205.7
f0_min                    77
f0_max                   414
f0_quantile25            171
f0_quan75                244
```

Compared to native speech, here are the prosodic features of your speech: Function *mysp.myprosody(p,c)*

```
import myprosody as mysp

p="Walkers" # Audio File title
c=r"C:\Users\Shahab\Desktop\Mysp" # Path to the Audio_File directory (Python 3.7)


mysp.myprosody(p,c)
```

```
Compared to native speech, here are the prosodic features of your speech:
average_syll_pause_duration:      (:Out of Range)
No._long_pause:                  25.000000 (% percentile )
speaking_time:                   25.000000 (% percentile )
```

```
ave_No._of_words_in_minutes:      (:Out of Range)
articulation_rate:               66.666667 (% percentile )
No._words_in_minutes:            25.000000 (% percentile )
formants_index:                  25.000000 (% percentile )
f0_index:                        66.666667 (% percentile )
f0_quantile_25_index:            (:Out of Range)
f0_quantile_50_index:            (:Out of Range)
f0_quantile_75_index:             33.333333 (% percentile )
f0_std:                          25.000000 (% percentile )
f0_max:                          33.333333 (% percentile )
f0_min:                          (:Out of Range)
No._detected_vowel:              25.000000 (% percentile )
perc%._correct_vowel:            66.666667 (% percentile )
(f2/f1)_mean:                    66.666667 (% percentile )
(f2/f1)_std:                     33.333333 (% percentile )
no._of_words:                    25.000000 (% percentile )
no._of_pauses:                   25.000000 (% percentile )
intonation_index:                33.333333 (% percentile )
(voiced_syll_count)/(no_of_pause): 66.666667 (% percentile )
TOEFL_Scale_Score:                66.666667 (% percentile )
Score_Shannon_index:              66.666667 (% percentile )
speaking_rate:                    25.000000 (% percentile )
```

Development

My-Voice-Analysis was developed by MYOLUTIONS Lab in Japan. It is part of New Generation of Voice Recognition and Analysis Project in MYSOLUTIONS Lab. That is planned to rich the functionality of My-Voice Analysis by adding more advanced functions.