**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.