**Nasalance parameter for Speech Inversion Systems**

This document describes the steps for calculating the nasalance parameter for training the speech inversion (SI) systems

**Data Access and Handling**

1. **Get access** to the “HSN\_audio\_normal\_subjects” box folder from Liran Oren

2. Go to “New speech data” and from each subject’s data (eg. Subject 11), **download and save** all the .txt files (eg. Subject 11\_07.txt) to a local directory with the following directory structure “/New\_data/data\_files\_txt/subject<ID>/”

3. Go to “New speech data” and from each subject’s data (eg. Subject 11), **download and save** all the directories with scale values for oral and nasal micr signals (eg. Subject 11\_05 WAV Scale values) to a local directory with the following directory structure “/New\_data/scale\_files/subject<ID>/”

**Nasalance computation**

1. Method 1 : Using RMS of nasal and oral microphone signals

- Run “compute\_nasalance\_method1.m” matlab script by setting appropriate variables with file locations in “Load data” section

2. Method 2: Using the ratio of acoustical energy from nasal and oral microphone

- Run “compute\_nasalance\_method2.m” matlab script by setting appropriate variables with file locations in “Load data” section