

LABORATORY SESSION 1

Spoken Digit Recognition

Work to do before the day of the session

Objective: Record audio samples of spoken digits (0-9) for use in a digit recognition experiment.

Requirements:

1. Equipment:
 - Microphone (laptop built-in, headset, pro or mobile phone)
 - Better if you try different mics during the recording (not mandatory)
 - Audio recording software (Audacity recommended: <https://www.audacityteam.org/>). Others you already know welcome.
2. Recording:
 - Record each digit (0-9) at least 3 times
 - Minimum 30 audio files in total
3. Audio specifications:
 - File format: WAV
 - Bit depth: Minimum 16-bit
 - Sample rate: 48 kHz (will be standardized to a lower one later)
4. File naming convention: **D_surname_T.wav** Where:
 - D: Digit (0-9)
 - surname: Your last name
 - T: Attempt number (1-3)
 - Example: 5_lopez_2.wav (digit 5, surname Lopez, 2nd attempt)
5. Audio editing:
 - Trim silence from the beginning and end of each recording
 - Ensure only the spoken digit remains in the audio file

Steps:

1. Set up your recording equipment and software
2. For each digit (0-9):
 - a) Record the digit clearly
 - b) Trim silence from the beginning and end
 - c) Save the file using the naming convention
 - d) Repeat at least 3 times
3. Verify you have at least 30 properly named and edited audio files

Tips:

- Speak clearly and at a consistent volume
- Maintain a consistent distance from the microphone
- Record in a quiet environment to minimize background noise
- Use Audacity or any familiar audio editing software for recording and trimming

Reference: For examples of similar audio files, visit: <https://github.com/Jakobovski/free-spoken-digit-dataset/tree/master/recordings>

Submission: Upload all your audio files before the next lab session in a repository to be announced.

If you have any questions or issues with the recording process, please contact your professor for assistance.