University Avenue

University Avenue forms one boundary of the New Mexico State University campus. Recordings were made at a busy crosswalk located at a four-way traffic light. Fig. 1 shows the crosswalk on University Ave.

(a)

(b)

Figure 1: University Ave. looking (a) west and (b) northeast.

Recording Conditions

Extremely noisy
Minimal reverberation

Recording Equipment

(1) Dell Dimension XPS R400 PC (Pentium II @ 400MHz, 128MB RAM, 40GB disk, Windows 98)
(`www.dell.com`)
(1) Echo Layla 20-bit multitrack recording system (`www.echoaudio.com`)

(2) Shure omni-directional microphone Model VP64A2 (www.shure.com)
(2) Applied Research And Technology (ART) Professional processor series tube preamp (www.artroch.com)
(2) Balanced (XLR) microphone cables from microphones to preamps
(2) Balanced (XLR) microphone cables from preamps to Layla

Recording/Editing Software

Syntrillium Software Corporation's Cool Edit Pro v1.2 for recording and (www.syntrillium.com)
Aurora Plug-in vx.x for Cool Edit pro for impulse response measurements (aurora.ramsete.com/aurora/)
Mathwork's MATLAB v5.2 for editing signals to desired lengths (www.mathworks.com)
SoundApp PPC v2.7.3 for sample rate conversion to 16kHz from 48kHz (www-cs-students.stanford.edu/~franke/SoundApp/)

Recording Setup

Fig. 2 shows the schematic of recording setup with dimensions. Two speakers each wearing a Lavalier stand on the sidewalk near an intersection. Two omni-directional microphones are placed approximately 10' away from the speakers in opposite directions and facing the traffic flow. Background noise (traffic, walk signal, etc...) are included in the recordings. A three-minute recording sampled at 48kHz, 16 bit resolution was done for each of the following scenarios:

Recording 1 – Male speaker and male speaker with background noise
Recording 2 – Male speaker and female speaker with background noise
Background Noise – Background noise only

Figure 2: Schematic of recording setup.

Available Files

The file naming scheme is as follows.

```
aaaaaaaaa_bc_dd_eee_fff.wav

a = Acoustic environment
b = (L)eft or (R)ight microphone
c = (C)lip-on or (O)mnidirectional Microphone
d = (M)ale(M)ale, (M)ale(F)emale, (F)emale(F)emale, (B)ackground(N)oise
e = fs, (16k) or (48k)
f = duration, (15) or (180) seconds
```

Files available for this recording environment are listed below.

Recording 1	*Recording 2*
UnivAve_LC_MM_16k_15.wav	UnivAve_LC_MF_16k_15.wav
UnivAve_LC_MM_16k_180.wav	UnivAve_LC_MF_16k_180.wav
UnivAve_LC_MM_48k_15.wav	UnivAve_LC_MF_48k_15.wav
UnivAve_LC_MM_48k_180.wav	UnivAve_LC_MF_48k_180.wav
UnivAve_LO_MM_16k_15.wav	UnivAve_LO_MF_16k_15.wav
UnivAve_LO_MM_16k_180.wav	UnivAve_LO_MF_16k_180.wav
UnivAve_LO_MM_48k_15.wav	UnivAve_LO_MF_48k_15.wav
UnivAve_LO_MM_48k_180.wav	UnivAve_LO_MF_48k_180.wav
UnivAve_RC_MM_16k_15.wav	UnivAve_RC_MF_16k_15.wav
UnivAve_RC_MM_16k_180.wav	UnivAve_RC_MF_16k_180.wav
UnivAve_RC_MM_48k_15.wav	UnivAve_RC_MF_48k_15.wav
UnivAve_RC_MM_48k_180.wav	UnivAve_RC_MF_48k_180.wav
UnivAve_RO_MM_16k_15.wav	UnivAve_RO_MF_16k_15.wav
UnivAve_RO_MM_16k_180.wav	UnivAve_RO_MF_16k_180.wav
UnivAve_RO_MM_48k_15.wav	UnivAve_RO_MF_48k_15.wav

UnivAve_RO_MM_48k_180.wav	UnivAve_RO_MF_48k_180.wav
	Background Noise
	UnivAve_LC_BN_16k_15.wav
	UnivAve_LC_BN_16k_180.wav
	UnivAve_LC_BN_48k_15.wav
	UnivAve_LC_BN_48k_180.wav
	UnivAve_LO_BN_16k_15.wav
	UnivAve_LO_BN_16k_180.wav
	UnivAve_LO_BN_48k_15.wav
	UnivAve_LO_BN_48k_180.wav
	UnivAve_RC_BN_16k_15.wav
	UnivAve_RC_BN_16k_180.wav
	UnivAve_RC_BN_48k_15.wav
	UnivAve_RC_BN_48k_180.wav
	UnivAve_RO_BN_16k_15.wav
	UnivAve_RO_BN_16k_180.wav
	UnivAve_RO_BN_48k_15.wav
	UnivAve_RO_BN_48k_180.wav

Room Impulse Response Measurement

There is no impulse response measured for this acoustic environment.