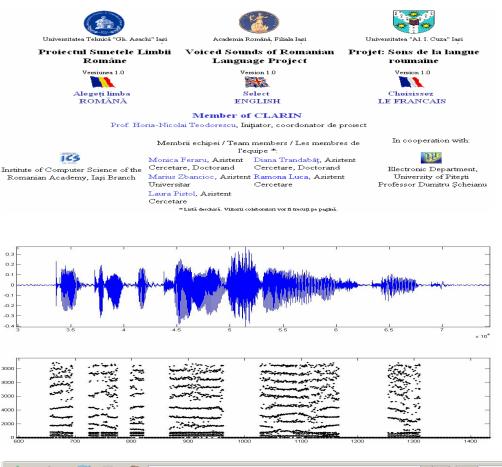
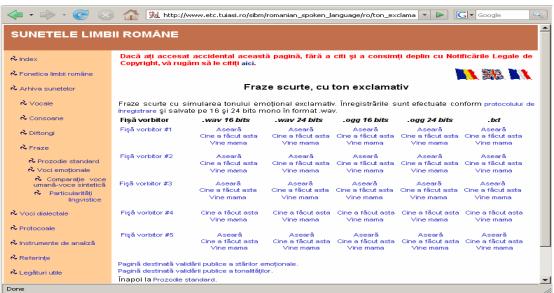
Bază de date, de înregistrări adnotate şi documentate, de voci cu încărcătură emoţională





Introduction

The SRoL database includes files with vowels, consonants, diphthongs, sentences with emotional states, linguistic particularities for the Romanian language, dialectal voices, and gnathosonic and gnatophonic sounds. It is the first Internet based annotated database of emotional speech for the Romanian language.

Content of speech files. The registered sentences are: *Mother is coming (Vine mama*, in Romanian), *Who did that? (Cine a făcut asta?*, in Romanian), *Last night (Aseara*, in Romanian), and *You came to me again (Ai venit iar la mine*, in Romanian).

Emotional states. The analyzed emotional states are happiness, sadness, fury, and the neutral tone.

Subjects. The database contains feminine and masculine voices; the speakers are aged between 25-35 years; they are from the middle area of Moldova and have no manifested pathologies.

Recording conditions. The recordings have been performed in a laboratory with reduced noise, but we have no phonic room. The recordings are accompanied by the speaker profile and by the questionnaire concerning vocal pathology and objective factors for every speaker.

Files acceptance and emotion validation. The speakers were chosen such that they have at least a minimal level of expressivity. The validation commission has a minimum of 5-10 persons.

Instruments. We have developed some instruments for vocal signal processing regarding the extraction of patterns from this signal, and the computing of the fundamental frequency trace, respectively the traces of formants F1, F2, F3. The tools developed by our research group involve many fundamental F0 detection methods based on the analysis in time domain: auto-correlation, method of difference function – AMDF; and methods based on spectral analyze: HPS – harmonic spectral product and cepstral analysis.

Conclusions:

This corpus, currently located at the address (http://iit.iit.tuiasi.ro/romanain_spoken_language /index.htm), is conceived as an Internet-based "dictionary of sounds and words" for the Romanian language. SRoL already includes more than 1000 recordings of spoken language, in different encoding formats and accompanied by annotations and by extensive documentation. The content of the site can be freely used for educational purposes such as analysis of sounds, analysis of specificities of the Romanian language pronunciation compared to other languages, Romanian language learning aided by computer, as well as for research purposes. Sound voice archives are useful in many domains, including phonology, applied computer science, and medicine.