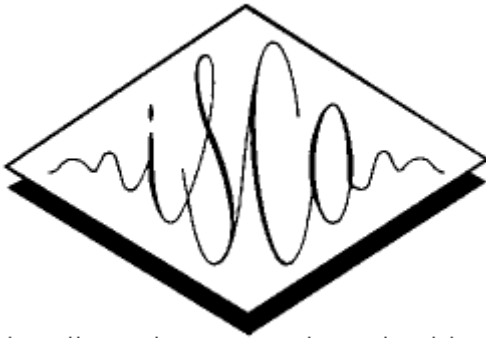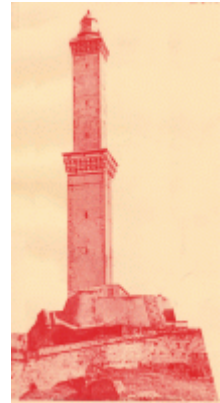ISCA Archive

http://www.isca-speech.org/archive

**EUROSPEECH '91
Second European
Conference on
Speech
Communication and
Technology**

**Genova, Italy
September 24-26, 1991**

Toward a Spoken Language Translator for Restricted-Domain Context-Free Languages

David B. Roe (1), Fernando Pereira (1), Richard W. Sproat (1), Michael D. Riley (1), Pedro J. Moreno (2), Alejandro Macarron (2)

**(1) AT&T Bell Laboratories
(2) Telefonica Investigacion y Desarrollo**

An effort is underway at AT&T Beil Laboratories and Telefonica Investigacion y Desarrollo to build a restricted domain spoken language translation system, which we call VEST (Voice English/Spanish Translator). The eventual goal is a voice input, voice output translator which is speaker-independent, and has a vocabulary of several thousand words covering a specific application. This paper is a progress report on the first step of our research, a system which recognizes several speakers and is limited to a few hundred words. The key new idea is that the speech recognition and the language analysis are tightly coupled by using the same language model, an augmented phrase structure grammar, for both.

Full Paper

Bibliographic reference. Roe, David B. / Pereira, Fernando / Sproat, Richard W. / Riley, Michael D. / Moreno, Pedro J. / Macarron, Alejandro (1991): "Toward a spoken language translator for restricted-domain context-free languages", In *EUROSPEECH-1991*, 1063-1066.