

PROJECT TITLE: SPEECH DATA BASE

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PROJECT SUMMARY:

The Speech Data Base program is in the second phase of a two phase R&D program. In the first phase, we developed speech data bases that fueled and supported the DARPA SCP continuous speech recognition efforts. In cooperation with MIT, an acoustic phonetic base [1] was created consisting of 10 spoken English sentences by each of 630 speakers (dialectically balanced). This data base provided seeds for the development of several speaker independent recognition systems. A resource management data base [2] reflecting query, command and control tasks in naval battle management, was established and provided the evaluation and demonstration infrastructure for the various speech recognizers developed under DARPA SCP program.

The second phase of the program is dedicated to creating spoken language system data bases using interactive problem solving performance tasks. Air Traffic Control, Cockpit Natural Language and NOSC's naval battle management are some of the candidates under consideration. The objectives of this data base are to provide challenges that will advance the state of the art in language modeling as well as speech recognition leading to true spoken language systems.

REFERENCES:

1. W. M. Fisher, G. R. Doddington, and K. M. Goudie-Marshall, The DARPA Speech Recognition Research Data Base: Specifications and Status, Proceedings of DARPA Speech Recognition Workshop, February 1986.
2. P. Price, W. M. Fisher, J. Bernstein and D. S. Pallett, The DARPA 1000-word Resource Management Data Base for Continuous Speech Recognition, Proceedings of the International Conference on Acoustics, Speech and Signal Processing, 1988, New York, pp. 651-654.