



European Union Language Technology Projects Exhibition



The European Union's language technology exhibition provides demonstrations from both the Language Engineering sector of the Telematics Applications Programme and ESPRIT Long Term Research RTD Projects:

ACCESS: *Automated Call Center Through Speech Understanding System*

is developing call centre technology capable of deal with incoming telephone calls automatically by recognising and understanding what the caller is saying. This is coupled with recognition of written forms, received by post or facsimile and speech generation in dialogues with the customer to complete forms. The system will initially handle standard insurance contract enquiries.

ARISE: *Automatic Railway Information Systems for Europe*

is developing an automatic train schedule enquiry service, accessed over telephone, which will handle the bulk of routine enquiries automatically. The service builds on two previous EC projects which used the emerging technologies of spoken language understanding, automatically handling dialogues with spontaneous speech. One system will be produced for each of the Dutch and Italian railway operators, and two for the French.

CAVE: *Caller Verification In Banking and Telecommunications*

develops speaker identification to authenticate the identity of a person seeking access to services offered over the public telephone network, such as telephone banking. The system is designed for ease of integration into a range of application environments, scaleable for handling a large number of clients and capable of operating with varying speech quality.

ELRA: *European Language Resources Association*

was established to collect, validate and distribute language resources. Additional activities include developing evaluation guidelines and license agreements as well as acting as a central broker between producers and users of resources. A set of written, spoken, terminology resources and related tools and software platforms are currently available. Details of these can be found on the Association's WEB site and in the ELRA Catalogue.

SPEECHDAT: *Speech Databases for Creation of Voice Driven Teleservices*

is producing spoken language resources for use in developing teleservices such as information services (eg. train timetable information), transaction services (eg. home shopping and banking) and other call processing services (eg. voice mail handling and call center systems). SpeechDat produces large-scale databases for a wide range applications and caller environments, covering all official EU languages and a range of dialects.

SPEEDATA: *Speech Recognition for Data-entry Applications*

is developing a system for data entry to databases containing both structured and textual data, using continuous speech. The user interface offers a robust system able to adapt to speaker variation and dialect and to operate with a range of languages (initially Italian and German).

VODIS: *Advanced Speech Technologies for Voice Operated Driver Information Systems*

is developing a means of directing in-car devices using the human voice. Based on an existing in-car driver information system, the BERLIN RCM303A from Bosch, this will enable the driver to control an entertainment centre, GSM telephone, and an information system for working out the best routes for a journey.

SPRACH: *Speech Recognition Algorithms for Connectionist Hybrids (ESPRIT Long Term Research)*

follows on from the previous WERNICKE project is concerned with developing new theories and algorithms, together with associated software tools, for continuous speech recognition.

THISL: *Thematic Indexing of Spoken Language (ESPRIT Long Term Research)*

building on the results of SPRACH and WERNICKE, is exploring the application of speech recognition and natural language processing technologies towards the indexing and retrieval of television, radio and text data (e.g. broadcast news).

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