

Computerized Speech Lab (CSL)

Over the years, Speech Technology Research (STR) Ltd. has developed a series of unique PC-based tools for capturing and analyzing speech data. The most well-known of these is the Computerized Speech Lab (CSL), which was developed jointly with Kay Elemetrics Corporation of New Jersey.

CSL is the leading speech analysis system for acoustic phonetics, speech language pathology, voice science, laryngology, language training, bioacoustics, and forensic acoustics. It achieved this leadership and reputation by providing the most comprehensive features, professional-level hardware, extensive databases, and the best product support in the field.

CSL is an extremely powerful yet very easy to use system for obtaining and analyzing speech signals. Vocal input can be read and stored at rates of up to 51,200 samples per second, providing detailed information to the clinician or researcher on a variety of speech parameters, including pitch, timing and energy. As you speak, this information is displayed graphically on the computer screen, providing immediate, easily-understood visual feedback to both subject and technician. These speech parameters can be used in the diagnosis and treatment of voice disorders, as an aid to language learning and accent reduction, and by speech researchers.

A number of CSL options exist which enhance the system, including a synthesis option which provides the ability to alter speech parameters and performs synthesis on the altered values, and a voice analysis option for calculating average pitch, pitch perturbation, shimmer and harmonic-to-noise ratio.

STR and Kay Elemetrics Corporation constantly work together to upgrade CSL, taking advantage of the latest developments in computer technology and the most recent advances in high-speed signal processing algorithms. Related products continue to be developed to perform a variety of specialized speech analysis and synthesis functions.

***STR is proud that CSL has become the accepted standard in speech clinics
and phonetics laboratories across North America***

Software Development Support for CSL

Speech Technology Research Ltd. and Kay Elemetrics Corporation constantly work together to upgrade the Computerized Speech Lab product line, to take advantage of the latest developments in computer technology and the most recent advances in speech and signal processing algorithms. Related products continue to be developed to perform a variety of specialized speech analysis and synthesis operations, for use in the disciplines of speech sciences, phonetics, applied linguistics, psychoacoustics and speech technology.

As a user of CSL and its supporting programs, you will appreciate the highly interactive nature of its design and the sheer number of things that you can do to the signal. However, there is always something else you will want CSL to do. The nature of research is to find new answers and to create new ways of getting to the problems, which have not been solved before. And these require new tools.

STR makes its expertise available to researchers and practitioners in these disciplines in order to assist them in developing applications that meet their research needs. These applications are integrated into the CSL or Multi-Speech environment or developed as independent programs.

Let STR use its experience in software design to build a specialized CSL application to meet your needs. We will modify or streamline specific processes in CSL according to your special requirements, or build new software routines that operate in the CSL hardware environment.