THE VISIBLE SPEECH (VISP) PLATFORM

A secure infrastructure for the study of speech acts and spoken conversations

The Visible Speech (VISP) platform supports distributed collaborations and reproducible research with several safeguards designed to reduce data processing risks. We make a unified toolbox available to users by consolidating several tools and frameworks, removing technical barriers to the adoption of digital speech processing across fields.

Audio recordings of speech are personally identifiable information (PII) under the GDPR

Like all other PII, speech is considered sensitive personal data if the recording relates to certain private domains, including the speaker's racial or ethnic origin, political views, religious or philosophical beliefs. membership of a trade union, and a person's sexual orientation or health status.

Speech is central to our everyday life and offers a promising new domain for disease biomarkers

The Visible Speech (VISP) platform was designed to offset barriers to research on speech by facilitating national collaborations in a secure environment.

What is offered inside the VISP secure platform:

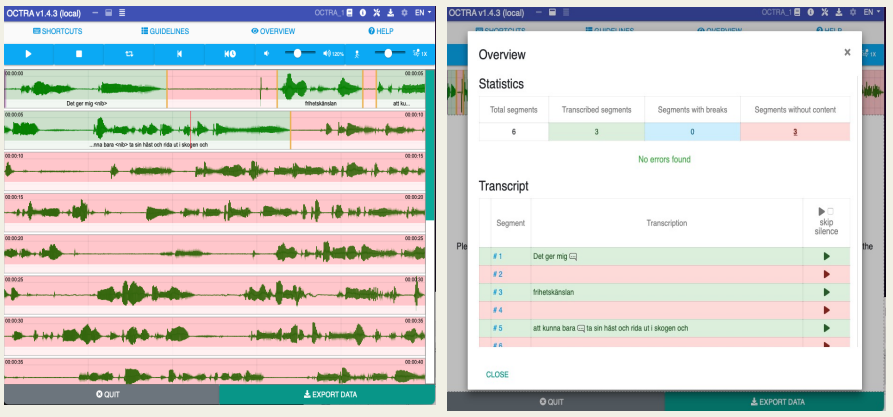
Access via a web browser, whitelisted and federated, eduGAIN associated login (SWAMID), and a task allocation framework that together enables distributed collaborations

A dedicated and isolated workspace with controlled access to the sensitive data

A unified digital speech processing toolbox (superassp) with validated algorithms for focused analyses of speech acts and conversations through audio recordings and physiological registrations.

A data management framework (reindeer) designed to alleviate efficiency bottlenecks and support standardization, facilitate archiving, and FAIR publication.

The public area: OCTRA



A tool for easy transcription of recordings that is

- accessible nationally and internationally
- supports work with sensitive interview recordings
- supports easy navigation
- supports easy export to common file formats, including a video subtitle format.

and will be our platform for making further tools available to more disciplines.

The browser-based interface for working with the sound file and multiple time-aligned signals (left), and an optional 2D/3D display for speech movement tracking or other multichannel data (right)

A Speech database management system (reindeer)

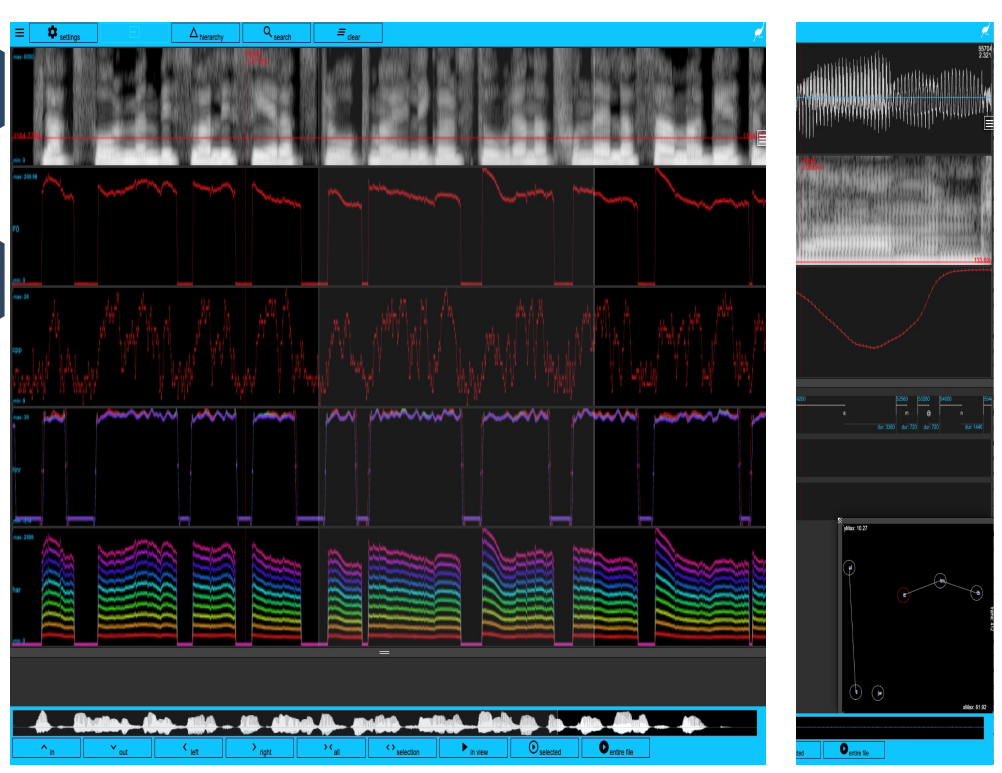
A unified Digital Speech Processing library (superassp)

Matlab implemented algorithms

Praat implemented algorithms

Python implemented algorithms

C/C++ implemented algorithms



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