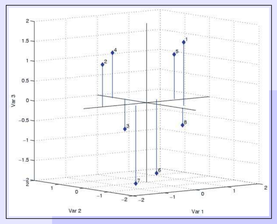
Speech synthesis research

The Centre for Speech Technology Research

A collaboration between the College of Science and Engineering
and the College of Humanities and Social Science

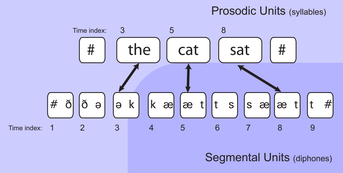


Testing Evaluation in Speech Synthesis

This project concerns looking at how speech synthesis is perceptually processed, to determine how we can meaningfully evaluate speech synthesis and to understand which aspects of synthetic speech are most important.

Expressive prosody

In collaboration with Stanford University we are developing ways to produce more natural prosody to allow speech synthesis to be suitable for a wider range of applications.



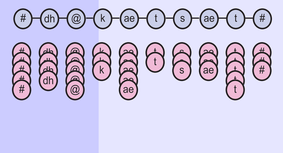
Local Languages

The Local Languages Speech Technology initiative is using Festival to provide speech synthesis applications in minority languages.

Automatic Unit Inventories

We are moving away from traditional phone-based representations of speech and automatically determining the type of units to use for unit selection.

Multisyn unit selection engine

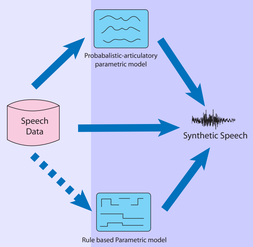


The Festival Speech Synthesis System

Festival is our open-source speech synthesis system and speech synthesis development environment, used by us and many researchers around the world.

Statistical Parametric Synthesis

We are developing new techniques which combine the naturalness of unit selection with the controllability of parametric techniques.

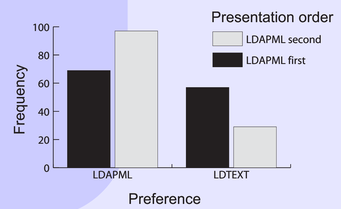


Target Costs and Database Design

By integrating the process of database design and target cost specification, this project will help develop more compact datasets which are essential to maintain performance as system complexity increases.

Speech synthesis integration

Research relating to how speech synthesis systems integrate with language generation and dialogue systems.



Collaboration with CereProc

Collaboration with speech technology provider CereProc enables us to incorporate cutting edge research into their latest products and realise the commercial potential of our research.

Combilex pronunciation lexicon

The Combilex project is developing and commercialising a database application to develop, maintain and fine tune pronunciation dictionaries to individual speakers of different accents of English.

Core Research

New Directions

Applications

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