Master Thesis title / MAL izenburua

Alzheimer detection in speech

Proposer(s) / Proposatzailea(k): names / izenak

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Description / Deskribapena

Alzheimer disease has considerable impact in speech. Recently several research works have proposed to use machine learning for early detection of the disease, mostly using discourse related features. In this master thesis the possibility of using additional acoustic features extracted from speech will be explored. Through a collaboration with a small company, recordings of speech from patients in different stages of the disease will be available for experimentation.

Goals / Helburuak

Find the acoustic parameters best suited for automatic Alzheimer detection.

Requirements / Betebeharrak

Basic knowledge of machine learning and some experience in python programming is mandatory.

Framework / Esparrua

The student will be working with the Aholab team and will have the opportunity to work with powerful GPUs. He or she will be enjoying the periodical meetings and seminars in a collaborative working environment.

Tasks and plan / Atazak eta plana

- Study of existing systems and alternatives
- Obtaining and preparing data
- Development of classifiers
- Evaluation
- Documentation