Multiple Annotator Modeling for Speech Quality, Likability, Personality, and Emotion Datasets
Abschlussarbeit (Bachelor, Master, Diplom)

Berlin, 24. March 2017

Das Quality and Usability Lab der TU Berlin vergibt eine Abschlussarbeit mit folgendem Titel / Thema:

Multiple Annotator Modeling for Speech Quality, Likability, Personality, and Emotion Datasets

Usually, subjective annotations or perceived speaker characteristics and speech quality are pooled to find the consensus labels of speech samples, e.g. by computing the average, median, or majority voting of the scores. However, this might not reflect the actual, ground truth label of the utterances. To overcome this difficulty and the costs of gathering data labels, approaches for annotator modeling have been proposed to determine the ground truth from the annotations and (sometimes) from speech features. It is assumed that the annotations are noisy versions of the ground truth. The task for this master thesis is to implement a technique for multiple annotator modeling and to evaluate it with annotations of speech quality and speaker likability, personality, and emotion.

Student tasks
- Literature review
- Tool development: takes multi-ratings as input and provides the ground truth label as output
- Testing the tool with already labelled speech databases
- Thesis writing

Requirements
- Interest in the topics machine learning, big data
- Studying informatics or a relevant discipline
- Very good programming skills and experience in any programming language
- Good English language skills oral and written

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