

Call for Participation INTERSPEECH 2012 Speaker Trait Challenge

Personality, Likability, Pathology

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The Challenge

Whereas the first open comparative challenges in the field of paralinguistics targeted more "conventional" phenomena such as emotion, age, and gender, there still exists a multiplicity of not yet covered, but highly relevant speaker states and traits. In the last instalment, we focused on speaker states, namely sleepiness and intoxication. Consequently, we now focus on speaker traits. The INTERSPEECH 2012 Speaker Trait Challenge broadens the scope by addressing three less researched speaker traits: the computational analysis of personality, likability, and pathology in speech. Apart from intelligent and socially competent future agents and robots, main applications are found in the medical domain.

In these respects, the *INTERSPEECH 2012 Speaker Trait Challenge* shall help bridging the gap between excellent research on paralinguistic information in spoken language and low compatibility of results.

Three Sub-Challenges are addressed:

- In the *Personality Sub-Challenge*, the personality of a speaker has to be determined based on acoustics potentially including linguistics for the OCEAN five personality dimensions, each mapped onto two classes.
- In the *Likability Sub-Challenge*, the likability of a speaker's voice has to be determined by a learning algorithm and acoustic features. While the annotation provides likability in multiple levels, the classification task is binarised.
- In the *Pathology Sub-Challenge*, the intelligibility of a speaker has to be determined by a classification algorithm and acoustic features.

The measures of competition will be Unweighted Average Recall of the two classes. Transcription of the train and development sets will be known. All Sub-Challenges allow contributors to find their own features with their own machine learning algorithm. However, a standard feature set will be provided per corpus that may be used. Participants will have to stick to the definition of training, development, and test sets. They may report on results obtained on the development set, but have only five trials to upload their results on the test sets, whose labels are unknown to them. Each participation will be accompanied by a paper presenting the results that undergoes peer-review and has to be accepted for the conference in order to participate in the Challenge. The organisers preserve the right to re-evaluate the findings, but will not participate themselves in the Challenge. Participants are encouraged to compete in all Sub-Challenges.

Overall, contributions using the provided or equivalent data are sought in (but not limited to) the following areas:

- Participation in the Personality Sub-Challenge
- Participation in the Likability Sub-Challenge
- Participation in the Pathology Sub-Challenge
- Novel features and algorithms for the analysis of speaker traits
- Unsupervised learning methods for speaker trait analysis
- Perception studies, additional annotation and feature analysis on the given sets
- Context exploitation in speaker trait assessment

The results of the Challenge will be presented at Interspeech 2012 in Portland, Oregon. Prizes will be awarded to the Sub-Challenge winners. If you are interested and planning to participate in the Speaker Trait Challenge, or if you want to be kept informed about the Challenge, please send the organisers an [e-mail](mailto:) to indicate your interest and visit the [homepage](http://emotion-research.net/signs/speech-sig/is12-speaker-trait-challenge): <http://emotion-research.net/signs/speech-sig/is12-speaker-trait-challenge>

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