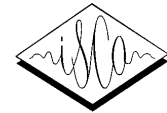


## Call for Papers

Special Issue of  
**COMPUTER  
SPEECH AND  
LANGUAGE**

on

### **Broadening the View on Speaker Analysis**



In the last five decades of automatic speech analysis and more recently automatic singing analysis, the focus of research was laid on the linguistic and structural content side: words (and note-events) and their higher level interpretation and understanding. Yet, when it comes to the human behind speaking and singing, so far, literature has been mostly interested in the identity of the person. Only in the last one and a half decade, increasing effort was invested to computationally analyse an increasingly higher variety of speakers' and singers' states and traits to characterize the person. By temporal grouping, there are the short term states comprising speaking and singing style and voice quality, emotions (full-blown, prototypical), and emotion-related states or affects such as stress, intimacy, interest, confidence, uncertainty, deception, politeness, frustration, sarcasm, and pain. Next comes the medium term phenomena between states and traits including (partly) self-induced more or less temporary states (e.g., sleepiness, medical and alcohol intoxication, health state, mood such as depression), and structural (behavioural, interactional, social) signals (role in dyads, groups, and alike, friendship and identity, positive/negative attitude). Finally, there are long term traits, such as biological trait primitives (e.g., height, weight, age, gender), group/ethnicity membership (race/culture/social class with a weak borderline towards other linguistic concepts, i.e., speech and singing registers such as dialect or nativeness), personality traits (likeability and personality in general) - just to mention a few. There is no doubt on the huge variety of highly promising application scenarios in understanding and modelling speakers and singers from their person side. Further, these tasks are so far mostly handled in isolation when it comes to automatic analysis. Yet, it seems intuitive that these are highly inter-dependent.

This Special Issue thus aims at *Broadening the View on Speaker Analysis*. It will focus on technical issues for highly improved and robust speaker (and singer) state and trait analysis and provide forum for some of the very best experimental work on this topic. Original, previously unpublished submissions are encouraged within the following scope:

- Speaker Analysis (Affect, Intoxication, Sleepiness, Pathology, Personality, etc.)
- Singer Analysis in Music Potentially Including Voice Separation
- Efficient Methods for Combination of Acoustic and Linguistic Cues
- Feedback for Voice Coaching
- Exploitation of Mutual Dependence of States and Traits
- Distributed Speaker Analysis
- Unsupervised Learning, Analysis by Synthesis Approaches, and Databases
- Robustness in Speaker Analysis (Coding, Noise, Over-talk, Reverberation, Package Loss, etc.)
- Confidence Measures in Speaker Analysis
- Contextual Information in Speaker Analysis
- Novel Machine Learning Solutions and Features for Speaker Analysis
- Real World Application

#### **Important Dates**

Submission Deadline	1 March 2012
First Notification	1 May 2012
Final Version of Manuscripts	1 September 2012
Tentative Publication Date	October 2012

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#### **Submission Procedure**

Prospective authors should follow the regular guidelines of the Computer Speech and Language Journal for electronic submission (<http://ees.elsevier.com/csl>). During submission authors must select this Special Issue (short name "Speaker Analysis").