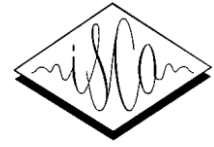




Call for Papers
Special Issue of
Speech Communication
on
Sensing Emotion and Affect –
Facing Realism in Speech Processing



Human-machine and human-robot dialogues in the next generation will be dominated by natural speech which is fully spontaneous and thus driven by emotion. Systems will not only be expected to cope with affect throughout actual speech recognition, but at the same time to detect emotional and related patterns such as non-linguistic vocalization, e.g. laughter, and further social signals for appropriate reaction. In most cases, this analysis clearly must be made independently of the speaker and for all speech that “comes in” rather than only for pre-selected and pre-segmented prototypical cases. In addition - as in any speech processing task, noise, coding, and blind speaker separation artefacts, together with transmission errors need to be dealt with. To provide appropriate back-channelling and socially competent reaction fitting the speaker's emotional state in time, on-line and incremental processing will be among further concerns. Once affective speech processing is applied in real-life, novel issues as standards, confidences, distributed analysis, speaker adaptation, and emotional profiling are coming up next to appropriate interaction and system design. In this respect, the Interspeech Emotion Challenge 2009, which has been organized by the guest editors, provided the first forum for comparison of results, obtained for exactly the same realistic conditions. In this special issue, on the one hand, we will summarise the findings from this challenge, and on the other hand, provide space for novel original contributions that further the analysis of natural, spontaneous, and thus emotional speech by late-breaking technological advancement, recent experience with realistic data, revealing of black holes for future research endeavours, or giving a broad overview. Original, previously unpublished submissions are encouraged within the following scope of topics:

- Machine Analysis of Naturalistic Emotion in Speech and Text
- Sensing Affect in Realistic Environments (Vocal Expression, Nonlinguistic Vocalization)
- Social Interaction Analysis in Human Conversational Speech
- Affective and Socially-aware Speech User Interfaces
- Speaker Adaptation, Clustering, and Emotional Profiling
- Recognition of Group Emotion and Coping with Blind Speaker Separation Artefacts
- Novel Research Tools and Platforms for Emotion Recognition
- Confidence Measures and Out-of-Vocabulary Events in Emotion Recognition
- Noise, Echo, Coding, and Transmission Robustness in Emotion Recognition
- Effects of Prototyping on Performance
- On-line, Incremental, and Real-time Processing
- Distributed Emotion Recognition and Standardization Issues
- Corpora and Evaluation Tasks for Future Comparative Challenges
- Applications (Spoken Dialog Systems, Emotion-tolerant ASR, Call-Centers, Education, Gaming, Human-Robot Communication, Surveillance, etc.)

Composition and Review Procedures

This Special Issue of Speech Communication on *Sensing Emotion and Affect – Facing Realism in Speech Processing* will consist of papers on data-based evaluations and papers on applications. The balance between these will be adjusted to maximize the issue's impact. Submissions will undergo the normal review process.

Guest Editors

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Important Dates

Submission Deadline	April 1 st , 2010
First Notification	July 1 st , 2010
Revisions Ready	September 1 st , 2010
Final Papers Ready	November 1 st , 2010
Tentative Publication Date	December 1 st , 2010

Submission Procedure

Prospective authors should follow the regular guidelines of the Speech Communication Journal for electronic submission (<http://ees.elsevier.com/specom/default.asp>). During submission authors must select the “Special Issue: Sensing Emotion” when they reach the “Article Type”.