



# EURASIP Journal on Audio, Speech, and Music Processing

## Special Issue on Atypical Speech & Voices: Corpora, Classification, Coaching & Conversion

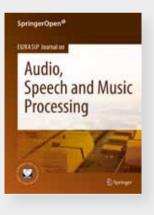
With speech processing technology becoming more and more present in our every-day lives, it has become increasingly important to include all types of voices, speaking situations, and styles from all parts of our society, i.e., to move beyond the "typical".

Examples of such less typical patterns may include speaking while eating, during physical exercise, singing, as well as a wide range of pathological effects or speech generated by special aged groups (children, elderly).

In fact, recent advances in the field of Computational Paralinguistics allow for automatic recognition, analysis, and synthesis of an ever-increasing range of "atypical" phenomena. At the same time, deeper analysis methods have opened doors to new assistive technologies, such as coaching systems, serious games, and tutoring systems, as well as diagnostic aids (e.g., for early detection of autism spectrum disorders, Alzheimer's or Parkinson's diseases). Tutoring systems, for example, have opened up new opportunities for voice professionals, such as public speakers, singers, and teachers, providing them with feedback on prosodic aspects, vibrato parameters, "presence" or quality. Further, methods of speech/voice enhancement and conversion have enabled improvements in intelligibility of spoken content, as well as socio-emotional communication skills of e.g., speakers on the autism spectrum.

In this light and given the steadily growing research activities and their importance, we openly invite papers describing various aspects of analysis and synthesis of atypical speech and voices as well as their successful applications.

Submissions must not have been previously published and must have specific connection to audio, speech, and music processing.



## Call for Papers

### Potential topics include, but are not limited to:

- Automatic Recognition of Atypical Speech & Voice Patterns
- Analysis of Atypical Speech, Singing & Voices
- Robustness in Automatic Speech Recognition against Atypical Phenomena
- Synthesis of Atypical Speech, Singing & Voices
- Enhancement and Conversion for Intelligibility Improvement of Atypical Speech & Voices
- Resources of Atypical Speech, Singing or Voice Patterns
- Multimodal Integration for Atypical Speech & Voice Processing (e.g., videolaryngoscopy, videokymography, fMRI, etc.)
- Tutoring Systems for Atypical Speech & Voice
- Serious Gaming Approaches in Atypical Speech & Voices
- Relationship Between Atypical Speech & Voices and Neurological Conditions

# Submission Instructions:

Before submission authors should carefully read over the Instructions for Authors, which are located at <u>http://asmp.eurasipjournals.com/authors/instructions</u>. Prospective authors should submit an electronic copy of their complete manuscript through the SpringerOpen submission system at <u>http://asmp.eurasipjournals.com/manuscript</u> according to the submission schedule. They should choose the correct Special Issue in the "sections" box upon submitting. In addition, they should specify the manuscript as a submission to the "Special Issue on Atypical Speech & Voices: Corpora, Classification, Coaching & Conversion" in the cover letter. All submissions will undergo initial screening by the Guest Editors for fit to the theme of the Special Issue and prospects for successfully negotiating the review process.

#### Lead guest editor:

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