

Speech Communication

Call for Papers: Special Issue on
Non-Linear and Non-Conventional Speech Processing

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The field of speech processing has shown a very fast development in the past twenty years, thanks to both technological progress and to the convergence of research into a few mainstream approaches. However, some specificities of the speech signal are still not well addressed by the current models. New models and processing techniques need to be investigated in order to foster and/or accompany future progress, even if they do not match immediately the level of performance and understanding of the current state-of-the-art approaches.

An ISCA-ITRW Workshop on "Non-Linear Speech Processing" will be held in May 2007, the purpose of which will be to present and discuss novel ideas, works and results related to alternative techniques for speech processing departing from the mainstream approaches:

<http://www.congres.upmc.fr/nolisp2007>

We are now soliciting journal papers not only from workshop participants but also from other researchers for a special issue of Speech Communication on "Non-Linear and Non-Conventional Speech Processing"

Submissions are invited on the following broad topic areas:

- I. Non-Linear Approximation and Estimation
- II. Non-Linear Oscillators and Predictors
- III. Higher-Order Statistics
- IV. Independent Component Analysis
- V. Nearest Neighbours
- VI. Neural Networks
- VII. Decision Trees
- VIII. Non-Parametric Models
- IX. Dynamics of Non-Linear Systems
- X. Fractal Methods
- XI. Chaos Modelling
- XII. Non-Linear Differential Equations

All fields of speech processing are targeted by the special issue, namely :

1. Speech Production
2. Speech Analysis and Modelling
3. Speech Coding
4. Speech Synthesis
5. Speech Recognition
6. Speaker Identification / Verification
7. Speech Enhancement / Separation
8. Speech Perception

Important Dates:

Submissions due: December 1, 2007

First Notification of Decisions: March 1, 2008

Submission requirements:

Papers should follow the manuscript preparation requirements for Speech Communications submissions, as specified at

<http://authors.elsevier.com/journal/specom>. Authors are requested to submit their manuscripts via the online submission site, at <http://ees.elsevier.com/specom>, and to choose Professor Kuldip Paliwal as the handling Editor, and "Special Issue: NOLISP 2007" as the Article Type.
