Computational Methods for Audio Analysis

Special Session at

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28 August – 2 September, 2017 – Kos Island, Greece

http://www.eusipco2017.org/

Theme and Scope

Nowadays, computational methods are largely used to face complex modelling, prediction, and recognition tasks in different research fields. One of these fields is represented by the analysis of audio signals, which finds applications in communications, entertainment, security, forensics and health to name but a few.

The typical methodology adopted in these tasks consists in extracting and manipulating useful information from the audio stream to pilot the execution of automatized services. Such an approach is applied to different kinds of audio signals, from music to speech, from sound to acoustic data. The use of computational methods may also allow to provide a characterization of an audio stream by directly analyzing raw data. Moreover, cross-domain approaches to exploit the information contained in diverse kinds of environmental audio signals have been recently investigated.

It is indeed of great interest for the scientific community to understand the effectiveness of novel computational methods for audio analysis, in the light of all aforementioned aspects. The aim of this session is therefore to focus on the most recent advancements and their applicability to a wide range of audio analysis tasks.

Topics

Potential topics include, but are not limited, to:

- Computational Audio Processing
- Machine Learning for Speech and Audio Analysis
- Cross-domain Audio Analysis
- Deep Learning for Audio Applications
- Audio Source Separation and Localization
- Audio-based Security Systems and Surveillance
- Reinforcement Learning for Audio
- Music Information Retrieval
- Speech and Audio Forensics
- Computational Methods for Wireless Acoustic Sensor Networks
- Speech and Speaker Analysis and Classification
- Sound and Novelty Detection and Recognition
- Machine Learning for Speech Enhancement
- Intelligent Audio Interfaces
- Tensor Audio and Speech
- Computational Audio Reverberation

Important Dates

- **Paper submission**: March 05, 2017 (Extended)
- **Decision notifications**: May 25, 2017
- **Camera-ready papers**: June 17, 2017

Organizers

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