SignalProcessing

Special Issue on Music Signal Processing

Aims and scope:

Music is a ubiquitous and central part of our lives. Thanks to the digital revolution in music distribution and storage, music has become one of the most popular types of online multimedia content. From browsing personal collections, to discovering new artists, to managing and protecting the rights of music creators, computers are now deeply involved in almost every aspect of music consumption, not to mention their vital role in much of today's music production. Music processing aims at contributing concepts, models, and algorithms that extend the range of ways in which music data can be accessed, analyzed, manipulated, and created. Recent research (for instance, based on deep learning) is concerned with extracting meaningful features directly from music signals. These features can then be integrated and combined with other information sources including lyrics, sheet music, or contextual metadata obtained by expert annotators or collaborative tagging. In this context, digital signal processing plays an essential role in most of these tasks and has found its way into many research communities dealing with music-related data.

This special issue in the high-impact IEEE Signal Processing Magazine seeks to provide a venue accessible to a wide and diverse audience, surveying recent advances in music processing and music information retrieval with a focus on audio signals. Interested authors are asked to first prepare a white paper, based on the instructions and schedule outlined below.

Topics of interest include (but are not limited to):

- Music analysis
- Music information retrieval
- Source separation
- Singing voice processing
- Deep learning for music signals
- Audio effects processing
- Musical sound synthesis
- Multimodality (beyond audio)
- Interfaces, user interaction
- Novel applications

Important dates	
White paper due	January 10, 2018
Invitation notification	February 10, 2018
Manuscript due	April 10, 2018
1st review round	June 15, 2018
Revised manuscript due	July 20, 2018
Final acceptance notification	September 20, 2018
Camera-ready paper due	October 1, 2018
Publication date	January 2019

White papers are required, and full articles are invited based on the review of white papers. The white paper format is up to 4 pages in length, including proposed article title, motivation and significance of the topic, an outline of the proposed paper, and representative references; an author list, contact information and short bios should also be included. Articles submitted to this issue must be of tutorial and overview/survey nature and in an accessible style to a broad audience, and have a significant relevance to the scope of the special issue. Submissions should not have been published or be under review elsewhere. For submission guidelines, please visit: https://signalprocessingsociety.org/publications-resources/ieee-signal-processing-magazine

Guest editors:

Meinard Müller, International Audio Laboratories Erlangen, meinard.mueller@audiolabs-erlangen.de Bryan A. Pardo, Northwestern University, pardo@northwestern.edu Gautham J. Mysore, Adobe Research, gmysore@adobe.com Vesa Välimäki, Aalto University, vesa.valimaki@aalto.fi