Special Issue

Computational Acoustic Scene Analysis

Message from the Guest Editors

Computational acoustic scene analysis is a highly-active research field where audio signal processing and machine learning meet several scientific topics, such as room acoustics, microphone arrays, sound source localization, source separation, acoustic event detection, pattern classification, and many others. Emerging application fields include surveillance, environmental monitoring, hearing-aids, distant-speech interaction, for example in smart-home and industry automation. In most of these cases, state-of-the-art techniques are still inadequate for a deployment in realworld contexts. In this Special Issue, we aim to describe current advances on computational methods on acoustic scene analysis in the following topics, but not limited to them: Acoustic event detection and classification Acoustic scene classification

Environmental monitoring by means of audio signals Sound source localization and tracking Sound source and speech activity detection Blind source separation Acoustic scene understanding

Guest Editors

Dr. Maurizio Omologo Fondazione Bruno Kessler (FBK), 38122 Trento, Italy

Prof. Dr. Stefano Squartini Department of Information Engineering, Università Politecnica delle Marche, 60121 Ancona, Italy

Prof. Dr. Tuomas Virtanen Laboratory of Signal Processing, Tampere University of Technology, 33720 Tampere, Finland

Deadline for manuscript submissions

closed (15 June 2018)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/12166

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/ applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



<u>applsci</u>



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)