Call for Papers

Themed Series of APSIPA Trans. on Signal and Information Processing on
"**Advanced Acoustic, Sound and Audio Processing Techniques and Their Applications**"

With recent advances in sensing, computing, and communication capabilities, vast amounts of acoustic, sound, and audio (ASA) data can be easily accessed. With such a large and wide variety of data, it is possible to build systems for various applications based on state-of-the-art artificial intelligence (AI) algorithms. Although many AI-based systems with novel data and system architectures have been developed, there is still room for further performance improvements and directions for further exploration.

This themed series aims to promote further research on pattern recognition, information retrieval, and front-end processing (enhancement, separation, and noise cancellation) of ASA signals. We welcome submissions on emerging topics, novel algorithms, and advanced architecture and feature processing of ASA data. We also encourage submissions discussing practical issues of ASA data recording/capturing and system designs and potential solutions. Research topics of interest include but are not limited to:

- Biological and Biomedical Acoustic Signal Processing
    - Multi-modal learning
    - Biological sound collection and processing
    - Impaired voice transformation
    - Assisitve hearing technologies
    - Physiological sound processing
    - Pathological disordered voice classification
- Advanced Signal Processing and Machine Learning for Audio and Speech Applications
    - Source separation
    - Source localization
    - Dereverberation
    - Noise reduction
    - Virtual acoustic reproduction
- Recent Advances in Active Control of Sound
    - Signal processing and algorithms for active sound control
    - Machine learning for active sound control
    - Virtual (3-D) sound control
    - Applications of active sound control
- Advanced Topics on Sound Event and Scene Analysis
    - Acoustic scene classification

- ○ Sound event detection
- ○ Sound event localization
- ○ Anomalous sound detection
- ○ Learning from weakly-labeled data
- ○ Audio tagging
- ○ Real-world application of scene analysis

Each paper submitted to this series will be reviewed with the first-come-first-serve principle. The target of the first round of decision-making is 5 weeks, and the period of the first round of revision is 2 weeks. The paper will be accepted between 8-12 weeks (depending on 1 or 2 revisions). Each paper will be published as an open access article immediately after its acceptance. Once all papers in this series are published, they will be assembled into an online book with an editorial written by the guest editorial team. If a paper cannot be accepted within the publication window, it will be changed to a regular paper. If you are interested in paper submission, please refer to:
https://nowpublishers.com/Journal/AuthorInstructions/SIP.
Any further questions, please contact: yu.tsao@citi.sinica.edu.tw

Submission Window: July 1, 2022 to October 31, 2022

Publication Window: September 1, 2022 to December 31, 2022

Guest Editorial Team

Yu Tsao, Academia Sinica

Shoji Makino, Waseda University

Yoshinobu Kajikawa, Kansai University

Nobutaka Ono, Tokyo Metropolitan University