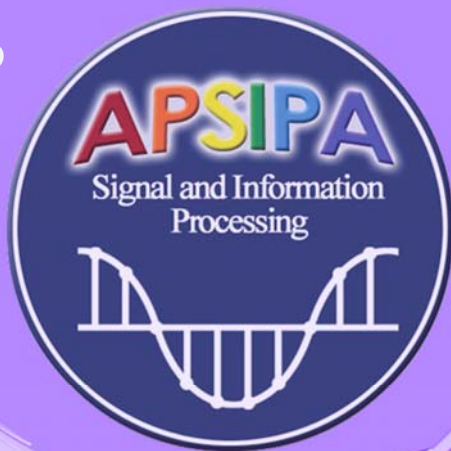


Issue 20

June 2019



**APSIPA**  
NEWSLETTER  
Asia-Pacific Signal and Information Processing Association Newsletter

## Greetings!



Welcome to the June issue of the APSIPA Newsletter.

The first issue of APSIPA Newsletter was published in April 2012. In each issue of Newsletter, we tried our best to disseminate information that would be of interest to APSIPA community. These included recent research developments in signal and information processing area, announcements related to APSIPA Transactions, Distinguish lectures, election news etc. In the next few issues, we have pleasure in inviting chairs of various APSIPA Technical Committees (TCs) to be guest editors. We hope this can help members understand more about APSIPA technical committees. You can find the schedule in this issue. I am sure we are all looking forward to seeing news related to different APSIPA TCs.

Don't forget that APSIPA Annual Summit and Conference will be held in Lanzhou, China from 18 to 21 November 2019. Updated news is available at <http://www.apsipa2019.org/>. To celebrate the tenth anniversary of APSIPA, APSIPA magazine was published. The magazine contained 42 articles written by APSIPA Presidents, Founders, Keynote Speakers, BoG Members, Annual Summit and Conference Organizers, TC Chairs and Distinguished Lecturers. A hard copy has been distributed to members during APSIPA ASC 2018 in Hawaii. We are pleased to tell that the soft copy is now available at

[http://www.apsipa.org/doc/magazine/apsipa\\_magazine2018.pdf](http://www.apsipa.org/doc/magazine/apsipa_magazine2018.pdf)

Besides, a photo gallery has been set up at <http://www.apsipa.org/photo/photo.htm>. You may find photos related to previous APSIPA ASC and some APSIPA activities there.

Enjoy reading the APSIPA magazine, seeing the photos as well as reading this issue!

Bonnie Law  
APSIPA Newsletter EiC

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## Upcoming Newsletters Schedules

There are seven technical committees in APSIPA. They are established to promote activities to cover the wide spectrum of research area in signal and information processing. To allow members to know more about APSIPA technical committees (TCs), chairs of these TCs are invited to be guest editors for the next few issues of APSIPA Newsletters. Below are the schedules.

### Issue: August 2019



Speech, Language and Audio (SLA) TC

<http://www.apsipa.org/TC/SLA.html>

TC chair: **Prof. Dong Wang**

Tsinghua University (China)

<http://wangd.cslt.org/>

### Issue: September 2019



Signal and Information Processing Theory and Methods (SIPTM) TC

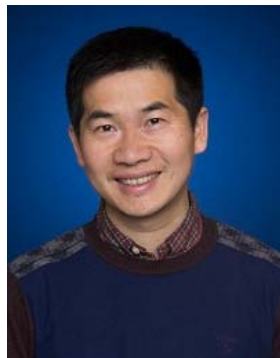
<http://www.apsipa.org/TC/SIPTM.html>

TC chair: **Prof. Mingyi He**

Northwestern Polytechnical University (China)

<http://teacher.nwpu.edu.cn/hemingyi.html>

### Issue: October 2019



Signal Processing Systems: Design and Implementation (SPS) TC

<http://www.apsipa.org/TC/SPS.html>

TC chair: **Prof. Zhiyi Yu**

Sun Yat-Sen University (China)

<http://seit.sysu.edu.cn/teacher/127>

**Issue: November 2019****Biomedical Signal Processing Systems (BioSiPS) TC**

<http://www.apsipa.org/TC/BioSiPS.html>

TC chair: **Prof. Kazushi Ikeda**

Nara Institute of Science and Technology (NAIST) (Japan)

<https://sites.google.com/view/milab/kazushi>

**Image, Video and Multimedia (IVM) TC**

<http://www.apsipa.org/TC/IVM.html>

TC chair: **Prof. Sanghoon Lee**

Yonsei University (Korea)

<http://insight.yonsei.ac.kr>

**Issue: December 2019****Multimedia Security and Forensics (MSF) TC**

<http://www.apsipa.org/TC/MSF.html>

TC chair: **Prof. Isao Echizen**

National Institute of Informatics (Japan)

[http://research.nii.ac.jp/~iechizen/official/members\\_echizen-e.html](http://research.nii.ac.jp/~iechizen/official/members_echizen-e.html)

## News about APSIPA ASC 2019

APSIPA ASC 2019 ([www.apsipa2019.org](http://www.apsipa2019.org)) is the 11th annual conference organized by Asia-Pacific Signal and Information Processing Association (APSIPA). It will be held on November 18-21, 2019 in Lanzhou, China. The conference venue is Gansu International Conference Center.

### Updated about keynote speakers



Wen Gao, Department of Computer Science and Technology, Peking University, China.



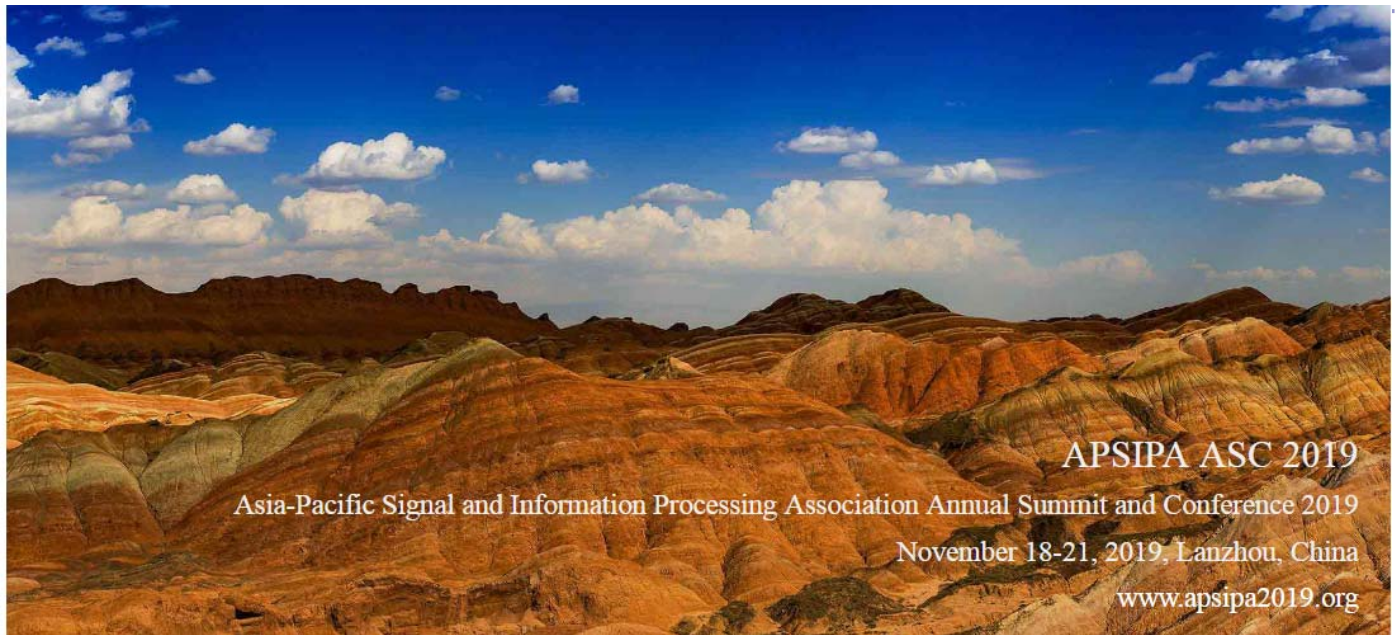
Chin-Hui Lee, School of ECE, Georgia Tech, USA.

Topic: Transfer Learning: from Bayesian Adaptation to Teacher-Student Modeling



Kate Knill, Automatic Language Teaching and Assessment Institute (ALTA), Cambridge University, UK.

Topic: Applying Deep Learning in Non-native Spoken English Assessment



## Updated about tutorials

Tutorial will be held on the first day of APSIPA ASC 2019 (November 18, 2019)

- **Tensor Component Analysis**  
Yipeng Liu  
Associate Professor, School of Information and Communication Engineering, University of Electronic Science and Technology of China (UESTC).
- **Speech Enhancement based on Deep Learning and Intelligibility Evaluation**  
Yu Tsao  
Associate Research Fellow, Research Center for Information Technology Innovation (CITI), Academia Sinica, Taiwan.  
Fei Chen  
Department of Electrical and Electronic Engineering, Southern University of Science and Technology.
- **Fundamental and Progress of Deep Learning based Statistical Parametric Speech Synthesis**  
Zhenhua Ling  
Associate Professor, National Engineering Laboratory of Speech and Language Information Processing, University of Science and Technology of China.
- **Signal Processing for Marine Target Detection and Classification**  
Xiaolong Chen and Jian Guan  
Professor, Marine Target Detection Research Group, Naval Aviation University, China.

## Call for Papers: Special Issue for APSIPA Transactions on Signal and Information Processing (ATSIP)

Topic of the special issue: **Data-Driven Image, Video and Multimedia Content Analysis: the Current and the Future**

Brief description:

Data-driven research based on signal processing analysis has shown remarkable technological advances in the fields of computer vision, image analysis, and speech analysis, close to human recognition ability or even beyond. In addition, utilizing this methodology as leverage, researchers have been studying on human emotion, perception, recognition, preference, and even the art world, and moving beyond the imagination to new creative areas. As a result, the accuracy of signal processing and computer vision has been rapidly grown up, and the barriers of each field have collapsed in the past, and the union of different fields is becoming easier and faster. This technology is very important to collect and analyze efficient data, and recent advances in deep-learning technology have made it possible to more accurately analyze human ability beyond cognitive ability. It is so difficult to predict the boundary enough to question the extent to which it is a technical limit. These fields are really diverse, encompassing engineering, medicine, aesthetics, psychology, humanities, and theology, and it is difficult to define the diversity as a word of acknowledgment. In addition, through data-driven learning, not only in the engineering field, but also in researchers in other fields, research that has been difficult to summarize has begun to be summarized. This tells us very clearly how the analysis of the information in the data breaks down the barriers between fields. The aim of this special issue is to provide researchers and professionals with high-quality tutorial-style papers addressing the latest advances in the design, development, and deployment of data-driven based signal processing analysis technologies for various applications. A special emphasis will also be devoted to not only cover the current state-of-the-art, but also new and emerging trends. Prospective authors are invited to submit tutorial-style papers on topics related to data-driven based signal processing analysis including but not limited to the following:

- Current and emerging multimedia contents analysis
- Data-driven signal analysis for cross-over applications
- Performance improvement of computer vision field via artificial intelligence.
- Deep-learning technology for signal processing analysis
- Validation, verification, and performance assessment methodologies of signal processing/computer vision algorithms
- Signal processing analysis for medicine, aesthetics, psychology, humanities, and theology and arts.

Editor in Chief APSIPA T-SIP

[Tatsuya Kawahara, Professor, School of Informatics, Kyoto University, Japan](#)

Editors of the special issue:

Chia-Hung Yeh, National Taiwan Normal University, Taiwan (Lead Guest Editor)

[<yeh@mail.ee.nsysu.edu.tw>](mailto:yeh@mail.ee.nsysu.edu.tw)

Yuichi Tanaka, Tokyo University of Agriculture and Technology, Japan [<ytnk@cc.tuat.ac.jp>](mailto:ytnk@cc.tuat.ac.jp)

Huihui Bai, Beijing Jiaotong University, China [<hbbai@bjtu.edu.cn>](mailto:hbbai@bjtu.edu.cn)

Tentative schedule of submission and publication:

Submission deadline: July 30, 2019

Publication date: December 31, 2019

Papers are published upon acceptance, regardless of the Special Issue publication date.

Please refer to the journal website for paper submission procedure. <http://journals.cambridge.org/sip>

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## Latest Articles from APSIPA Transactions on Signal and Information Processing (ATSIP)

- **Robust adaptive beamforming with enhancing the interference suppression capability**
  - Linxian Liu, Yang Li
  - DOI: <https://doi.org/10.1017/ATSIP.2019.9>
  - Published online: 13 June 2019, e15
- **Combining acoustic signals and medical records to improve pathological voice classification**
  - Shih-Hau Fang, Chi-Te Wang, Ji-Ying Chen, Yu Tsao, Feng-Chuan Lin
  - DOI: <https://doi.org/10.1017/ATSIP.2019.7>
  - Published online: 11 June 2019, e14
- **A review of blind source separation methods: two converging routes to ILRMA originating from ICA and NMF**
  - Hiroshi Sawada, Nobutaka Ono, Hirokazu Kameoka, Daichi Kitamura, Hiroshi Saruwatari
  - DOI: <https://doi.org/10.1017/ATSIP.2019.5>
  - Published online: 14 May 2019, e12
- **Semi-fragile speech watermarking based on singular-spectrum analysis with CNN-based parameter estimation for tampering detection**
  - Kasorn Galajit, Jessada Karnjana, Masashi Unoki, Pakinee Aimmanee
  - DOI: <https://doi.org/10.1017/ATSIP.2019.4>
  - Published online: 16 April 2019, e11

## Most Read Articles from ATsip

<https://www.cambridge.org/core/journals/apsipa-transactions-on-signal-and-information-processing/most-read>

- **A review of blind source separation methods: two converging routes to ILRMA originating from ICA and NMF**
  - Hiroshi Sawada, Nobutaka Ono, Hirokazu Kameoka, Daichi Kitamura, Hiroshi Saruwatari
  - DOI: <https://doi.org/10.1017/ATSIP.2019.5>
  - Published online: 14 May 2019, e12
- **A tutorial survey of architectures, algorithms and applications for deep learning**
  - Li Deng
  - DOI: <https://doi.org/10.1017/atsip.2013.9>
  - Published online: 22 January 2014, e2

- **Use cases and challenges in telecom big data analytics**
  - Chung-Min Chen
  - DOI: <https://doi.org/10.1017/ATSIP.2016.20>
  - Published online: 12 December 2016, e19
  
- **Environmental sound recognition: a survey**
  - Sachin Chachada, C.-C. Jay Kuo
  - DOI: <https://doi.org/10.1017/ATSIP.2014.12>
  - Published online: 15 December 2014, e14
  
- **Unified access in licensed and unlicensed bands in LTE-A Pro and 5G**
  - Boon Loong Ng, Hongbo Si, Aris Papasakellariou, Jianzhong Charlie Zhang
  - DOI: <https://doi.org/10.1017/ATSIP.2017.7>
  - Published online: 12 July 2017, e6

## **Most Cited Articles from ATSIP**

<https://www.cambridge.org/core/journals/apsipa-transactions-on-signal-and-information-processing/most-cited>

- **A tutorial survey of architectures, algorithms and applications for deep learning**
  - Li Deng
  - DOI: <https://doi.org/10.1017/atsip.2013.9>
  - Published online: 22 January 2014, e2
  
- **An overview on video forensics**
  - Simone Milani, Marco Fontani, Paolo Bestagini, Mauro Barni, Alessandro Piva, Marco Tagliasacchi, Stefano Tubaro
  - DOI: <https://doi.org/10.1017/ATSIP.2012.2>
  - Published online: 28 August 2012, e2
  
- **Recent advances on active noise control: open issues and innovative applications**
  - Yoshinobu Kajikawa, Woon-Seng Gan, Sen M. Kuo
  - DOI: <https://doi.org/10.1017/ATSIP.2012.4>
  - Published online: 28 August 2012, e3
  
- **Survey on audiovisual emotion recognition: databases, features, and data fusion strategies**
  - Chung-Hsien Wu, Jen-Chun Lin, Wen-Li Wei
  - DOI: <https://doi.org/10.1017/ATSIP.2014.11>
  - Published online: 11 November 2014, e12



- **Survey on securing data storage in the cloud**

- Chun-Ting Huang, Lei Huang, Zhongyuan Qin, Hang Yuan, Lan Zhou, Vijay Varadharajan, C.-C. Jay Kuo
- DOI: <https://doi.org/10.1017/ATSIP.2014.6>
- Published online: 23 May 2014, e7

## APSIPA Membership

### Membership Benefits:

- Links to highly qualified people within the organization to develop research, technology, teaching, and career
- Discount fee on APSIPA conferences
- Reduced subscription fee for APSIPA journals
- Access to information about the international activities in signal and information processing such as conferences, continuing education, short courses, seminars, distinguished lecture series, student internships, scholarships, job listings, publication venues, and mentorships

To motivate APSIPA members to participate in APSIPA conferences, the registration for the [11th APSIPA conference](#) implies an automatic renewal of APSIPA membership up to the end of December 2020.

You may join as:

- **Student Membership:** Student members are those who are enrolled full time in universities, institutes, or any accredited degree
- **Full Membership:** Full members are individuals interested in being part of the APSIPA mission to excel signal and information processing field. They are eligible to vote, hold positions in APSIPA association, and contribute to serve as editorial board and program committee members in APSIPA journals and conferences
- **Life Membership:** Full members may choose to subscribe as life members pending on paying the discount fee of life membership. [Early-bird registration fee is available for life members at all times when registering for APSIPA ASC](#)

Type of membership	Fees in US\$	Fees in HK\$
Student Membership	10 (per annual)	78 (per annual)
Full Membership	30 (per annual)	234 (per annual)
Life Membership	300 (a one-off fee)	2340 (a one-off fee)

**Act Today! Join us at: <http://www.apsipa.org/reg.asp>**

## Previous APSIPA Distinguished Lectures

Speaker: Professor Christian Ritz, University of Wollongong  
Title: Novel microphone arrays for processing speech sound scenes: co-incident arrays, ad-hoc arrays and co-prime arrays  
Date: 12 April 2019  
Venue: National University of Singapore, Singapore  
Local host: Professor Haizhou Li



## Summary of Links

- APSIPA ASC 2019: <http://www.apsipa2019.org>
- APSIPA Transaction on Signal and Information Processing: <http://journals.cambridge.org/sip>
- Paper Submission to APSIPA Transaction on Signal and Information Processing: <http://mc.manuscriptcentral.com/apsipa>
- APSIPA Industrial Activities: <http://www.apsipa.org/industrial.htm>
- APSIPA Friend's Lab: <http://www.apsipa.org/friendlab/FriendLabs.htm>.
- APSIPA Membership Registration/Renewal: <http://www.apsipa.org/reg.asp>
- APSIPA Magazine: [http://www.apsipa.org/doc/magazine/apsipa\\_magazine2018.pdf](http://www.apsipa.org/doc/magazine/apsipa_magazine2018.pdf)
- APSIPA Photo Gallery: <http://www.apsipa.org/photo/photo.htm>

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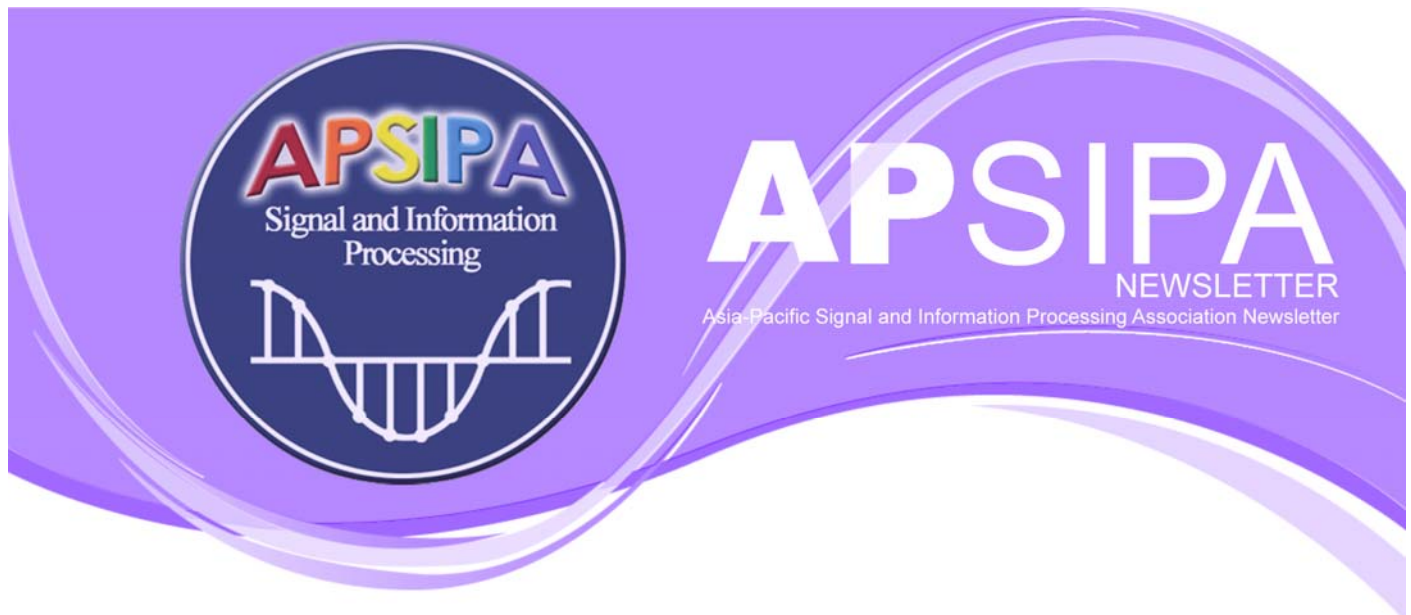
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