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APSIPA NEWSLETTER

Asia-Pacific Signal and Information Processing Association Newsletter

Greetings!

Welcome to the December issue of the APSIPA newsletter! I hope that you had a great time and enjoyed the recently concluded APSIPA ASC 2021. As announced during the conference, APSIPA ASC 2022 will be held in Chiang Mai, Thailand. Stay tuned for more updates in the up-coming issues of the APSIPA newsletter.

In this issue, we feature the new function added to the APSIPA HQ website - the APSIPA Video Archive and Server. In addition, we also have the pleasure to invite Prof. Toshihisa Tanaka to introduce the APSIPA Japan Local Chapter.

As always, we invite you to send us your contributions to be published in the APSIPA Newsletter. You are also welcome to share your thoughts with us about future developments in this newsletter.

I would also like to take this opportunity to thank the editorial board members for their support and assistance throughout my term as the Editor-in-Chief of the APSIPA Newsletter. From January 2022, Prof. Sanghoon Lee of Yonsei University will be serving as the new Editor-in-Chief.

Please enjoy reading this issue! Happy New Year!

A/Prof. KokSheik Wong
EiC
Monash University Malaysia
Malaysia

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APSIPA Video Archive and Server

APSIPA has been established for more than ten years and has organized many different events, to promote the research and education of signal and information processing. The APSIPA Annual Summit, which is the key event of APSIPA, is organized every year. In addition, APSIPA Local Chapters and Technical Committees have organized many activities, such as forums, workshops, etc.

To provide more services and benefits to APSIPA members, the videos recorded of APSIPA activities will be placed on an APSIPA Video Server. Currently, some videos of the following APSIPA activities are posted on this video server:

- APSIPA ASC 2015
- APSIPA ASC 2017
- US Local Chapter Panel Discussions

To watch the videos, APSIPA members may visit this link: http://www.apsipa.org/video/, and then log in with their username and password.

Videos of future APSIPA activities will be available on the Video Server. More videos from past activities will also be posted in the coming future.

Prepared by: Prof. Kenneth Lam

Introduction to APSIPA Japan Local Chapter

Japan Chapter's Challenge: Full online to hybrid, the hybrid to …

Professor Toshihisa Tanaka
(Tokyo University of Agriculture and Technology)

Chair
APSIPA Japan Local Chapter

APSIPA Japan Chapter is the first local chapter established in the APSIPA. The executive committee consists of four members:

Chair: Toshihisa Tanaka (Tokyo University of Agriculture and Technology)

Vice-Chair: Norihide Kitaoka (Toyohashi University of Technology)

Secretary: Hiroshi Higashi (Kyoto University)

Treasurer: Sayaka Shiota (Tokyo Metropolitan University)

We held the first kick-off (fully online) workshop on November 5, 2020, in conjunction with IEICE Signal Processing Symposium. We invited two prominent speakers engaged in cutting-edge research.

The first talk was entitled "Deep speech source separation considering spatial model" by Dr. Masato Togami from LINE Corporation, Japan. The second talk was entitled "DeepNNK: A polytope interpolation framework for graph-based neural network analysis" by Prof. Antonio Ortega from the University of Southern California, USA.

The second workshop was held on March 4, 2021, in conjuction of the joint workshop of IEICE Technical Committees on Signal Processing, Speech, and Applied Acoustics. We invited Dr. Yu Tsao from Academia Sinica, Taiwan, to the talk entitled "Deep-learning-based Speech Enhancement with Its Application to Assistive Oral Communications Devices."

The above events were held fully online due to the Covid-19 pandemic. Despite the limited environment of being held entirely online, we were delighted to have many participants and had very fruitful discussions.

Our Chapter's biggest and most challenging event was held on December 2021: APSIPA ASC 2021, Tokyo, Japan. Since the organizing committee of ASC 2021 decided to have the ASC in a hybrid style, everything has been new for the ASC 2021 team, and everything has been challenging. The Japan Chapter fully cooperated in the organization and management of ASC 2021, and made a great effort to successfully host the first-ever simultaneous on-site and online ASC in the history of APSIPA.

Our challenge continues. We will be organizing the next hybrid (online and in-person) event in Naha, Okinawa, Japan, in March 2022. The pandemic situation is still not clear the following March. However, we are confident to successfully organize the event in a hybrid style because we have experience of the hybrid style in the ASC 2021. The details of the event in March will be announced soon. We would be happy to meet many participants at the event.

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

Original paper

- **Cross-layer knowledge distillation with KL divergence and offline ensemble for compressing deep neural network**
  - Hsing-Hung Chou, Ching-Te Chiu, Yi-Ping Liao
  - DOI: https://doi.org/10.1017/ATSIP.2021.16
  - Published online: 17 November 2021, e18

- **TGHop: an explainable, efficient, and lightweight method for texture generation**
  - Xuejing Lei, Ganning Zhao, Kaitai Zhang, C.-C. Jay Kuo
  - DOI: https://doi.org/10.1017/ATSIP.2021.15
  - Published online: 27 October 2021, e17

- **Social rhythms measured via social media use for predicting psychiatric symptoms**
  - Kenji Yokotani, Masanori Takano
  - DOI: https://doi.org/10.1017/ATSIP.2021.17
  - Published online: 28 October 2021, e16

- **Two-stage pyramidal convolutional neural networks for image colorization**
  - Yu-Jen Wei, Tsu-Tsai Wei, Tien-Ying Kuo, Po-Chyi Su
  - DOI: https://doi.org/10.1017/ATSIP.2021.13
  - Published online: 08 October 2021, e15

- **Robust deep convolutional neural network against image distortions**
  - Liang-Yao Wang, Sau-Gee Chen, Feng-Tsun Chien
  - DOI: https://doi.org/10.1017/ATSIP.2021.14
  - Published online: 11 October 2021, e14

Most Read Articles from ATSIP

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

- **An overview of channel coding for 5G NR cellular communications**
  - Jung Hyun Bae, Ahmed Abotabl, Hsien-Ping Lin, Kee-Bong Song, Jungwon Lee
  - DOI: https://doi.org/10.1017/ATSIP.2019.10
  - Published online: 24 June 2019, e17

- **Graph representation learning: a survey**
  - Fenxiao Chen, Yun-Cheng Wang, Bin Wang, C.-C. Jay Kuo
  - DOI: https://doi.org/10.1017/ATSIP.2020.13
  - Published online: 28 May 2020, e15

- **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

Most Cited Articles from ATSIP for the Last 3 Years

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

- **Evaluating word embedding models: methods and experimental results**
  - Bin Wang, Angela Wang, Fenxiao Chen, Yuncheng Wang, C.-C. Jay Kuo
  - DOI: https://doi.org/10.1017/ATSIP.2019.12
  - Published online: 08 July 2019, e19

- **Grayscale-based block scrambling image encryption using YCbCr color space for encryption-then-compression systems**
  - Warit Sirichotedumrong, Hitoshi Kiya
  - DOI: https://doi.org/10.1017/ATSIP.2018.33
  - Published online: 01 February 2019, e7

- **A comprehensive study of the rate-distortion performance in MPEG point cloud compression**
  - Evangelos Alexiou, Irene Viola, Tomás M. Borges, Tiago A. Fonseca, Ricardo L. de Queiroz, Touradj Ebrahimi
  - DOI: https://doi.org/10.1017/ATSIP.2019.20
  - Published online: 12 November 2019, e27

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 13th APSIPA conference implies an automatic renewal of APSIPA membership up to the end of December 2022.

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

Local Chapters

Call for Establishing APSIPA Local Chapters

APSIPA starts Local Chapter system from the beginning of 2020. If you are interested in establishing a local chapter in your region, please see the guideline and submit the application form to APSIPA Head quarter and VP Membership Relations and Development.Membership Benefits:

APSIPA Local Chapters

APSIPA spans more than 20 countries in Asia-Pacific region, but local Chapters serve APSIPA members by holding meetings at the local level. If you're interested in connecting with professionals, academics and students in your region, getting involved locally provides exciting opportunities for networking, research, and project collaboration with others.

Chapters are constituted by a minimum of ten active members, and are established by application to APSIPA.

APSIPA offers unique benefits to individual groups, including industry, students and young professionals, and women in APSIPA, and numerous specialized events throughout the year.

For more details, please see the guideline of APSIPA Local Chapters. If you want to establish a local chapter in your region, please fulfill the application form and submit it to APSIPA Headquarter and VP Membership Relations and Development.

APSIPA Chapter Operation Manual

APSIPA Chapter Application Form

Webpage for APSIPA Local Chapters

(a) Japan Chapter
http://www.apsipa.org/chapter/Japan.htm

(b) Taiwan Chapter
http://www.apsipa.org/chapter/Taiwan.htm

(c) US Chapter
http://www.apsipa.org/chapter/US.htm

APSIPA ASC 2022

NOVEMBER 7 - 10, 2022, CHIANG MAI, THAILAND

WWW.APSIPA2022.ORG

ASIA-PACIFIC SIGNAL AND INFORMATION PROCESSING ASSOCIATION ANNUAL SUMMIT AND CONFERENCE 2022

Important Dates

May 31, 2022	May 31, 2022	June 30, 2022	June 31, 2022	July 1 to August 31, 2022	August 15, 2022	September 1, 2022	September 1, 2022	November 7-10, 2022
Submission of Proposals for Special Sessions	Submission of Proposals for Forum, Panel & Tutorial Sessions	Submission of Regular Papers	Submission of Special Session Papers	Submission of Research Abstract	Notification of Papers Acceptance	Submission of Camera-Ready Papers	Author (Early-Bird) Registration Deadline	Tutorials, Summit and Conference

APSIPA ASC 2022 (www.apsipa2022.org) is the 14th annual conference organized by Asia-Pacific Signal and Information Processing Association (APSIPA), which will be held on November 7-10, 2022 in Chiang Mai, Thailand. Founded in 2009, APSIPA organization (www.apsipa.org) aims to promote research and education in signal processing, information technology, and communications. The annual conferences have been held previously in Tokyo, Japan (2021), Auckland, New Zealand (2020), Lanzhou, China (2019), Hawaii, USA (2018), Kuala Lumpur, Malaysia (2017), Jeju, Korea (2016), Hong Kong, SAR China (2015), Siem Reap, Cambodia (2014), Kaohsiung, Taiwan (2013), Los Angeles, USA (2012), Xi' an, China (2011), Singapore (2010), and Sapporo, Japan (2009). APSIPA is interested in all aspects of applications. Please refer to the conference web page for full information. All accepted papers are expected to be included in IEEE Xplore and indexed by EI, like all previous years. The technical program includes, but not limited to the following areas

- Signal Processing Systems: Design and Implementation
- Signal and Information Processing Theory and Methods
- Speech, Language, and Audio
- Biomedical Signal Processing and Systems
- Image, Video, and Multimedia
- Multimedia Security and Forensics
- Wireless Communications and Networking
- Deep Learning: Algorithm, Implementations, and Applications
- Signal and Information Processing in Education
- Medical Signal Acquisition, Analysis and Processing
- Internet of Things Technology
- Data Analytics and Machine Learning
- Human Biometrics and Security Systems
- Signal and Information Processing for Smart Systems

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The International Conference on Acoustics, Speech, & Signal Processing (ICASSP), is the IEEE Signal Processing Society's flagship conference on signal processing and its applications. The 47th edition of ICASSP will be held in Singapore. The programme will include keynotes by pre-eminent international speakers, cutting-edge tutorial topics, and forward-looking special sessions. ICASSP also provides a great networking opportunity with a wide range of like-minded professionals from academia.

CONFERENCE TOPICS

- Applied Signal Processing Systems
- Audio & Acoustic Signal Processing
- Bio Imaging & Signal Processing
- Compressive Sensing, Sampling & Dictionary Learning
- Computational Imaging
- Computer Vision Financial Signal Processing
- Deep Learning/Machine Learning for Signal Processing
- Image, Video & Multidimensional Signal Processing
- Industrial Signal Processing
- Information Forensics & Security
- Internet of Things
- Multimedia Signal Processing
- Quantum Signal Processing
- Remote Sensing and Signal Processing
- Sensor Array & Multichannel Signal Processing
- Signal Processing for Big Data
- Signal Processing for Communication & Networking
- Signal Processing for Cyber Security
- Signal Processing for Education
- Signal Processing Over Graphs
- Signal Processing Theory & Methods
- Speech & Language Processing

Call for Tutorials: Tutorials at ICASSP form an important part of the program, giving attendees the opportunity to learn about current research areas that are of growing interest to the signal processing community. Therefore, the tutorials should be prepared and presented to a wide audience. Prospective presenters may discuss their proposals with the tutorials chair before the submission.

Call for Special Sessions: The program for ICASSP 2022 will include Special Sessions that complement the main program, in line with the technical scope of the conference. Please refer to the conference webpage for information about Special Session proposals and submissions.

Call for Exhibitors and Sponsors: ICASSP offers exhibitors and companies an opportunity to showcase their products and innovative solutions, as well as recruitment and networking opportunities. Please check the conference webpage for information about signing up to become an exhibitor or sponsor at ICASSP 2022.

SP Society Journal Paper Presentations: Authors of papers in the journals of the IEEE Signal Processing Society will have the opportunity to present their work at ICASSP 2022, subject to space availability and approval by the Technical Program Chairs. Only papers published between October 20, 2020 and October 19, 2021 are eligible for presentation at ICASSP 2022. The papers presented at ICASSP will neither be reviewed nor included in the proceedings for the IEEE Xplore Digital Library.

Open Preview: Open Preview allows conference proceedings to be available in the IEEE Xplore Digital Library, free of charge, to all customers, 30 days prior to the conference start date, through the conference end date.

IMPORTANT DATES

Special Session Proposal	9 August 2021
Special Session Acceptance	6 September 2021
Tutorial Proposals	11 October 2021
Paper Submissions	~~1 October~~ 6 October 2021
Grand Challenge Proposal	18 October 2021
Grand Challenge Acceptance	8 November 2021
Tutorial Acceptance	15 November 2021
SPS Journal/Letters Due	10 January 2022
Paper Acceptance	21 January 2022
Final Paper	16 February 2022
Author Registration	16 February2022
Open Preview	22 April - 27 May 2022
Show and Tell Proposals	7 March 2022

icassp 2022 Singapore

Summary of Links

- APSIPA ASC 2022: http://www.apsipa2022.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 Local Chapters: http://www.apsipa.org/chapter/index.html
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- APSIPA Magazine: http://www.apsipa.org/doc/magazine/apsipa_magazine2018.pdf
- APSIPA Photo Gallery: http://www.apsipa.org/photo/photo.htm

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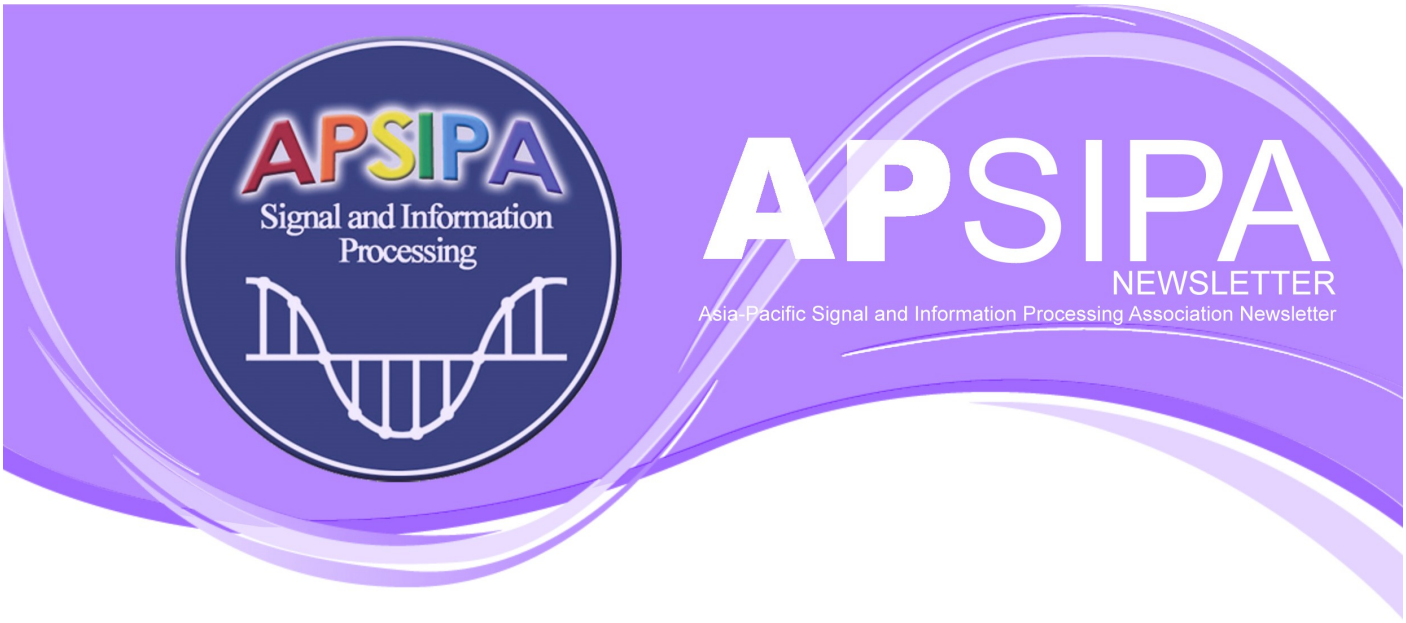

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