

#### **Greetings!**

Welcome to the October issue of the APSIPA newsletters!

Above all, the most important event in our Society, the APSIPA ASC (Annual Summit and Conference) 2023, will be held in Taipei, Taiwan from Oct. 31 to Nov. 3. Detailed information was provided by Prof. Jing-Ming Guo and is included in this News Letter. At the end of the conference, Annual General Meeting (AGM) is scheduled on November 3 at noon. Various activities are being discussed via email within our Society. Bidding for APSIPA 2026 was concluded and the selected venue is found at the end of the President's message. We request active participation from everyone. The 8th APSIPA Sadaoki Furui Prize Paper Award was awarded to Li, Jinyu. Congratulations.

I have good news to share.

Congratulations on the approval of the local chapter application from Vietnam (Chair: Nguyen Linh Trung) which is one of the results of our organizing the APSIPA workshops in Vietnam over the past two years. We thank Prof. Toshihisa Tabaka for his effort on membership relations and development.

Many activities are taking place in the local chapters.

As the activity of the local chapter, there was a seminar titled "The Synergy of AI and Video Compression in the Era of Internet of Video Things" by Dr. Yen-Kuang Chen, Santa Clara University, USA. The seminar was well attended and received, with about 51

attendees (30 in person and 21 by Zoom). Friday, September 29, 2023, 5:30 -7:00 p.m. Pacific Time (California).

According to APSIPA Bylaws, BoG Members are elected by direct vote of the voting Members of the Association. One third of BoG Members will be elected

annually. We would like to extend our warm congratulations to them.

Sanghoon Lee

Please enjoy reading this issue!



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### **Message from APSIPA President**

I hope you had a good summer break. As the President of APSIPA, I had a special summer this year by visiting two ASEAN countries for APSIPA-sponsored workshops. The objective of the workshops is to promote signal and information processing in the region and get prospective researchers involved in ASPIPA activities. Here are reports on the events.

• Workshop in Hanoi at HUST (Hanoi University of Science and Technology) on July 8

This is the second workshop in Vietnam following the one held in VNT (Vietnam National University) last year. Profs. Kosin Chamnongthai, Toshihisa Tanaka, and Jing-ming Guo joined me from the APSIPA BoG to give a talk. There are around 20 poster presentations by researchers and students of Vietnam. Many of them were in good quality and nominated for the special session of APSIPA ASC 2023.



• Workshop in Bandung at ITB (Institut Teknologi Bandung) on August 1

This is the first workshop in Indonesia. Bandung is three-hour drive from Jakarta and now (after the workshop) accessible by a high-speed train. ITB is the top-level technical university in Indonesia. Profs. Kosin Chamnongthai, Toshihisa Tanaka, Weisi Lin joined me from the APSIPA BoG to give a talk. I also invited Prof. Sakriani Sakti and Candy Mawalim, who graduated from ITB and now is a professor in JAIST (Japan Advanced Institute of Science and Technology). Their talks were particularly inspiring students to be a future researcher. We had many questions from the audience. There were also about 30 poster presentations by researchers and students of Indonesia. We selected some of them to nominate for the special session of APSIPA ASC 2023.



We really had a good time there by meeting people of high potential. I believe in this potential for the advancement of APSIPA. The team of Hanoi made a bid to host APSIPA ASC 2026, which was selected by our conference board recently. Congratulations!

Best Regards
Tatsuya Kawahara
APSIPA President (2023-2024)
Email: kawahara@i.kyoto-u.ac.jp

### The Inauguration of the APSIPA Singapore Chapter on 16th Sept 2023

The APSIPA Singapore Chapter was officially launched on 16th September 2023, in conjunction with the Nanyang Speech Technology Forum (NSTF) at the Chui Huay Lim Club, Singapore. The forum was a free event for the public to learn about the latest developments in speech technologies. The forum was supported by COLPS and co-organized with IEEE Signal Processing Society Singapore Chapter and APSIPA Singapore Chapter. The forum website is https://www.colips.org/conferences/nysf2023/wp/2023/09/11/program-schedule/

The forum featured 12 research papers by students from National University of Singapore (NUS), Nanyang Technological University (NTU), and Singapore University of Technology and Design (SUTD). The presentations sparked lively discussions and exchanges of ideas among the authors and participants. It was a highly stimulating and interactive event. The committee also awarded two best student paper awards to the outstanding student presenters.

During the banquet of the forum, we introduced APSIPA and its activities to the audience, and we shared our plan for the upcoming activities of the APSIPA Singapore Chapter. Our main goals of the Singapore chapter are to:

- Encourage APSIPA student and full member activities
- Facilitate research collaboration by co-organizing distinguished lecturer series and student seminars with other local and overseas chapters
- Promote APSIPA membership in Singapore and participation in APSIPA ASC events.



## The Inauguration of the APSIPA Singapore Chapter on 16th Sept 2023

The current official committee members of the APSIPA Singapore Chapter:

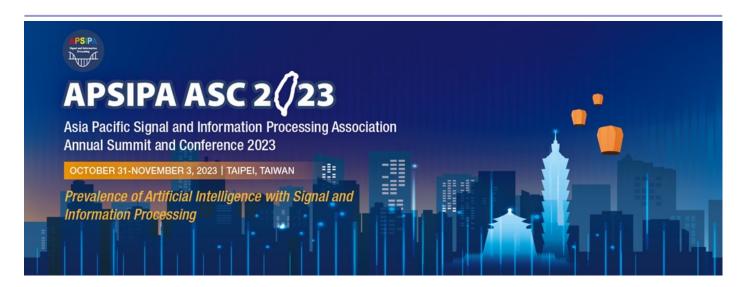
Honorary Chair: Prof. Li Haizhou Chair: Prof. Gan Woon-Seng Vice-Chair: Dr. Wu Yan

Secretary: Prof. Lee Kong Aik Tresurer: Prof. Cheung Mgai-Man

For more information on the APSIPA Singapore Chapter, please contact Gan Woon-Seng (ewsgan@ntu.edu.sg)

Drafted on 8th Oct 2023





## **WELCOME TO APSIPA ASC 2023!**

## **CONFERENCE VENUE**

# **Taipei International Convention Center** (TICC)

Add.: 1 Hsin-Yi Rd., Sec.5, Taipei 11049, Taiwan



## **CHECK OUR TECHNICAL PROGRAMS**

Program at a glance: <a href="https://www.apsipa2023.org/program.html">https://www.apsipa2023.org/program.html</a>

Tutorial: <a href="https://www.apsipa2023.org/tutorial.html">https://www.apsipa2023.org/tutorial.html</a>

Winter School: <a href="https://www.apsipa2023.org/winter.html">https://www.apsipa2023.org/winter.html</a>
Industrial Forum: <a href="https://www.apsipa2023.org/winter.html">https://www.apsipa2023.org/winter.html</a>
Women's Forum: <a href="https://www.apsipa2023.org/women.html">https://www.apsipa2023.org/women.html</a>

## **TRANSPORTATION**

Please visit our website for more details: <a href="https://www.apsipa2023.org/traffic.html">https://www.apsipa2023.org/traffic.html</a>



## **SOCIAL PROGRAMS**

## **Welcome Reception**

**Taipei International Convention Center** (TICC)

Location: Banquet Hall, 3F, TICC Date: October 31, 17:30-20:00

Address: 1 Hsin-Yi Rd., Sec.5, Taipei



With 30 years of cooking experience, executive chef Wang, Su-Nien applies his experienced culinary technique into the presentation of various delicacies. These dishes are definitely something that food lovers crave.

## **Banquet**

#### Silks Palace

Location: Banquet Hall, 3F Date: November 2, 18:00-21:00

Address: No.221 Chishan Road Section 2, Shil-

in, Taipei



#### Dine among and on imperial treasures at the Grand Opening of Silks Palace

The art of Chinese cuisine can now be experienced by the public in Taipei alongside the most comprehensive collection of Chinese artifacts in the world! After a month of soft opening days, Silks Palace, the much-anticipated BOT project conducted by Silks Hotel Group, had its official Grand Opening ceremony on June 25, on which day a unique nine-course Imperial Treasures Feast featuring dishes resembling items from National Palace Museum's signature collections was also introduced to give guests a better understanding of the close relationship between Chinese art and cooking.

## **APSIPA Transactions on Signal and Information Processing (ATSIP)**

## 1. The APSIPA Transaction on Signal and Information Processing (ATSIP) achieved several important milestones in 2022.

- . It received the first Journal Impact Factor from Clarivate in 2022
  - 2022 Journal Impact Factor: 3.2
  - 2022 Journal Impact Factor without self-citation: 3.0
- . Its 2022 CiteScore s 8.5.
  - . It ranked as #19 out of 122 journals in the category of Signal Processing (84th percentile)
  - . It ranked as #63 out of 379 journals in the category of Information Systems (83rd percentile)

#### 2. The time from submission to the first decision and the final decision is given below:

	Time (#Days) to First Decision	Time (#Days) to Final Decision
2012	177	178
2013	84	397
2014	77	231
2015	80	247
2016	84	171
2017	82	238
2018	50	112
2019	54	65
2020	24	42
2021	25	42
2022	23	42
2023	29	57

#### 3. It has 5 Special Issues in 2023

- Learning, Security, AIoT for Emerging Communication/Networking Systems (Jia-Ching Wang et al.)
- . Advanced Acoustic, Sound and Audio Processing Techniques and Their Applications (Yu Tsao et al.)
- Emerging AI Technologies for Smart Infrastructure (Jiaying Liu et al.)
- . AI for Healthcare (Sanjay Purushotham et al.)
- . Pre-trained Large Language Models for Information Processing (Bin Wang et al.)

#### 4. Two Special Issue call-for-papers are due on 10/31. They will appear in early 2024.

- . Emerging Wireless Sensing Technologies for Smart Environments (Yan Chen et al.)
- . Advanced Machine Learning Techniques for Remote Sensing: Algorithms and Applications (Man-On Pun et al.)

# **APSIPA Transactions on Signal and Information Processing Call for Papers in Themed Series**

#### Advanced Machine Learning Techniques for Remote Sensing: Algorithms and Applications

Guest Editors: Man-On Pun, Bo Huang, Huimin Liu, Xiaokang Zhang *Submission Deadline: 31 August 2023* Full details available here.

#### **Emerging Wireless Sensing Technologies for Smart Environments**

Guest Editors: Yan Chen, Vishal Monga, Chenshu Wu, Mojtaba Soltanalian, Dongheng Zhang, Daqing Zhang

Submission Deadline: 31 August 2023 Full details available here.

### APSIPA Sadaoki Furui Prize Paper Award

## 8th award will be presented in APSIPA ASC 2023 Dr. Li will give a talk on his overview paper

The 8th award will be presented in APSIPA ASC 2023 to Li, Jinyu, for their paper.

"Recent advances in end-to-end automatic speech recognition", APSIPA Transactions on Signal and Information Processing 11.1 (2022).

#### **Abstract**

Recently, the speech community is seeing a significant trend of moving from deep neural network based hybrid modeling to end-to-end (E2E) modeling for automatic speech recognition (ASR). While E2E models achieve the state-of-the-art results in most benchmarks in terms of ASR accuracy, hybrid models are still used in a large proportion of commercial ASR systems at the current time. There are lots of practical factors that affect the production model deployment decision. Traditional hybrid models, being optimized for production for decades, are usually good at these factors. Without providing excellent solutions to all these factors, it is hard for E2E models to be widely commercialized. In this paper, we will overview the recent advances in E2E models, focusing on technologies addressing those challenges from the industry's perspective.



### **Seminar APSIPA US Chapter**

Seminar (Friday, Sep 29, 2023, 5:30 – 7:00 pm PDT Pacific Time (California)):

#### Title:

The Synergy of AI and Video Compression in the Era of Internet of Video Things

Speaker: Dr. Yen-Kuang Chen, IEEE Fellow, Department of Computer Science and Engineering, Santa Clara University, USA

**Abstract:** Both video compression and computer vision make use of spatial and temporal patterns present in images. With the rise of the internet of video things, numerous opportunities have arisen for synergizing AI and video compression. In this presentation, we will explore two main aspects. Firstly, we'll delve into utilizing compressed data to perform AI tasks. Secondly, we'll dive into harnessing AI for video compression and image signal processing.

#### Speaker's Bio:



Yen-Kuang Chen received his Ph.D. degree from Princeton University. His research areas span from emerging applications that can utilize the true potential of multimedia and Internet of Things (IoT) to computer architecture that can embrace emerging applications. He has 100+ patents and 100+ technical publications. He is recognized as an IEEE Fellow for his contributions to algorithm-architecture co-design for multimedia signal processing.

Host: Professor Nam Ling, Wilmot J. Nicholson Family Chair Professor, Department of Computer Science & Engineering, Santa Clara University, USA

**Location: Santa Clara University SCDI Room 1301** 

Map: https://www.scu.edu/map/location/Sobrato-Campus-for-Discovery-and-Innovation



#### **Call for Book Proposals**

### **APSIPA Open Access Book Series**

<u>APSIPA</u> is launching the APSIPA Open Access Book Series in collaboration with the <u>NOW Publishers</u> and <u>Springer</u> publisher. By publishing a book through the APSIPA Open Access Book Series, authors can benefit from increased visibility, faster production, and no production fee. These books can be textbooks, multi-author edited volumes, research monographs, etc. At least one author of each of the books must be an <u>APSIPA member</u>, and they can choose the publisher and the mode of publication.

#### Aims:

APSIPA is an association, which promotes research and education on signal and information processing, and publishing Open Access Books is an effective way to achieve our goals. The advantages of Open Access Book are the increased visibility, low production fees, and a faster production process. APSIPA will support all production fees and share the revenue with the authors. Also, APSIPA Editorial Board will support the peer review process and manage the production process with the publishers.

#### **Proposal Submission:**

We invite prospective authors to submit the title, authors, book types (textbook, research monograph, handbook, multi-author edited book, etc.), contents, and a sample chapter. Also, please provide a one-page description of the aim and importance of the book. Please provide these materials in a free format to the <u>Editor-in-Chief</u>, Prof. Nam Ik Cho, via email to <u>nicho@snu.ac.kr</u>. When the proposal is accepted, the manuscript for the peer review needs to be submitted within eight months from the acceptance notification. Please visit <u>here</u> for details of the book production process and revenue sharing with APSIPA.

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### **APSIPA Membership**

Asia-Pacific of Signal and Information Processing Association (APSIPA) is an international association that promotes the advancement of signal and information processing research and development. This includes fostering international research exchange and nurturing young students and researchers to excel in our field. Signal and information processing is a core subject that finds its niche in many disciplines so advancements in SIP will benefit all these fields. The membership fees are greatly reduced to make APSIPA services available to as many people as possible and accordingly contribute widely to proliferate knowledge, which is one of the APSIPA missions.

To motivate APSIPA members to participate in APSIPA conferences, the registration for the <u>14th APSIPA</u> <u>conference</u> implies an automatic renewal of APSIPA membership up to the end of December 2023. Online Registration will open in September 2022.

#### **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

#### **Membership Categories:**

There are two main categories in APSIPA membership:

- 1. Individual Memberships
- Student Membership: members are those who are enrolled full time in universities, institutes, or any accredited degree.
- 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.

#### 2. Patron Memberships

• Patron Members shall consist of those institutions, companies, laboratories or other organizations in signals and information processing, and which shall be from time to time elected to membership in accordance with the Bylaws of the Association.

#### **Membership subscription Fees**

#### 1. Individual Memberships

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)

#### 2. Patron Memberships

The patron membership fee is decided upon agreement with APSIPA based on the type of organisation and number of participants.

## **Summary of Links**

- APSIPA ASC 2023: http://www.apsipa2023.org/
- APSIPA Transaction on Signal and Information Processing: <a href="http://journals.cambridge.org/sip">http://journals.cambridge.org/sip</a>
- Paper Submission to APSIPA Transaction on Signal and Information Processing: http://mc.manuscriptcentral.com/apsipa
- APSIPA Industrial Activities: <a href="http://www.apsipa.org/industrial.htm">http://www.apsipa.org/industrial.htm</a>
- APSIPA Friend's Lab: <a href="http://www.apsipa.org/friendlab/FriendLabs.htm">http://www.apsipa.org/friendlab/FriendLabs.htm</a>
- APSIPA Membership Registration/Renewal: <a href="http://www.apsipa.org/reg.asp">http://www.apsipa.org/reg.asp</a>
- APSIPA Local Chapters: <a href="http://www.apsipa.org/chapter/index.html">http://www.apsipa.org/chapter/index.html</a>
- APSIPA Magazine: <a href="http://www.apsipa.org/doc/magazine/apsipa">http://www.apsipa.org/doc/magazine/apsipa</a> magazine2018.pdf
- APSIPA Photo Gallery: <a href="http://www.apsipa.org/photo/photo.htm">http://www.apsipa.org/photo/photo.htm</a>

#### **APSIPA Who's Who**

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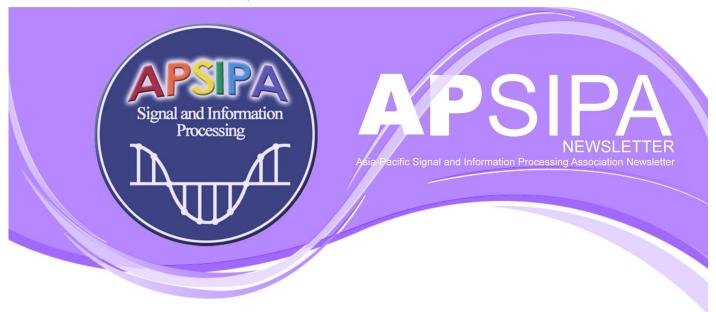
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