

Message from New Editor-in-Chief

Greetings! I feel deeply honored to succeed Prof. Sanghoon Lee to serve as the new EiC of APSIPA Newsletters since January of this year. I would like to thank Prof. Lee and the editorial board for their efforts in making APSIPA Newsletter a wonderful channel to deliver timely news to our APSIPA community.

It is great to see that APSIPA has been growing rapidly over the years. At the end of 2023, APSIPA approved two new local chapters (Korea and Thailand), which have held their kick-off events recently. In addition, APSIPA has signed a MoU with the China Society of Image and Graphics (CSIG) to promote our understanding and cooperation in various

fields. More information can be found on pages 4-9 of this newsletter.

We are excited to share with you that the Impact Factor of APSIPA Transactions on Signal and Information Processing (A-TSIP) has reached 3.2. It is a great achievement of the contributing authors, editorial board, reviewers, and the management team. Some statistics of A-TSIP, including the number of submissions and the acceptance rate, are available on pages 6-9.

We would also like to take this opportunity to invite everyone to participate in the upcoming APSIPA ASC 2024, which will be held in the new Galaxy International Convention Center (GICC) of Macau, 3-6 December 2024. The submission deadline for proposals of special sessions is 17 June 2024, and the submission deadline for the regular and special session papers is 21 July 2024. As a tradition, some selected APSIPA ASC papers will be published in A-TSIP as a special

issue. Traveling to Macau is very convenient: Macau International Airport, Hong Kong International Airport, Shenzhen Baoan International Airport, and Zhuhai Jinwan Airport are all nearby; High-speed trains connect Zhuhai-Macau border with many cities of China. We look forward to seeing you in December. Please check http://www.apsipa2024.org/ for more details.

Lastly, we invite you to send us your contributions to be published in the APSIPA Newsletter. You are also welcome to share your thoughts about future developments in this newsletter. Please enjoy reading this issue!

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Message from the APSIPA President Tatsuya Kawahara

In this March, I made a visit to Hong Kong. It is a part of the delegates of my university (Kyoto University). It is my first visit there since APSIPA ASC 2015, which was held in Hong Kong Poly-U. Hong Kong has changed a lot since then, and Poly-U has made some new buildings, but people at APSIPA headquarter has never changed; they are Prof. Wan-Chi Siu (Director), Kenneth Lam (Manager), Bonnie Law (Secretary), and Chris Chan (Treasurer). They have functioned as a backbone of our society, providing websites, membership services, and accounting services. I have worked for APSIPA many years even before becoming the President, but I found their work is always prompt and trustworthy. To be fair, their service level is much above professionals.

During my visit, we had an academic event named "APSIPA Workshop on Deep Learning and Robotics" on March 22. The speakers are from Poly-U and Kyoto University. There are about 30 attendees in the venue room and also another 20 online participants.

After the workshop, we visited the laboratory and the Dean of the School. Then, we had a meeting on the status of APSIPA and ASC 2024, which will be held in Macao in December, with the general chair Jiantao Zhou. We are trying to make it fruitful and memorable one. We are looking forward to a large number of paper submissions and attendance.





Best Regards Tatsuya Kawahara APSIPA President (2023-2024)

Email: kawahara@i.kyoto-u.ac.jp



APSIPA Distinguished Lecturers for 2024-2025

The Distinguished Lecturer (DL) Program is established to serve the communities by organizing lectures given by distinguished experts. It is an educational program that promotes the research and development of signal and information processing in Asia-Pacific region. During the two-year term, the APSIPA Distinguished Lecturers will be serving as ambassadors of APSIPA and outreaching to audience in Asia Pacific region as well as world. For more information about the DL Program, please contact Professor Mingyi He who is the Vice President of Institutional Relations and Education Program and the APSIPA IRE Board chair. Through the nomination/ recommendation from BoG members, and the Technical Committees, the evaluations/ discussions by APSIPA IRE Board, and final approval by BoG, nine newly selected Distinguished Lecturers for 2024 to 2025 are as follows:

- Kosin Chamnongthai, King Mongkut's Univ of Tech Thonburi
- Kun-Chih Chen, National Yang Ming Chiao Tung Univ
- Mu-Yen Chen, National Cheng Kung University
- Echizen Isao, National Institute of Informatics
- Lianru Gao, Aerospace Information Research Institute, Chinese Academy of Sciences
- Pourya Shamsolmoali, Queen's University Belfast
- **Dongyuan Shi**, Nanyang Tech Univ
- Zhiguo Shi, Zhejiang Univ
- Yan Wu, A*STAR Institute for Infocomm Research

Kickoff Meeting of Korea Chapter

APSIPA Korea Chapter had its kickoff meeting in February 2024 at Jeju Island, Korea. The chapter was approved in October 2023, and it started working from the beginning of this year. Its primary objective is to bring together Korean signal-processing researchers, providing them with the opportunity to participate in various APSIPA activities and collaborate with APSIPA members worldwide. The local chapter members hope to contribute to signal processing R&D in both industry and academia and facilitate their professional development through APSIPA activities. Additionally, the chapter aims to support the professional development of young Korean signal-processing researchers through various APSIPA activities.

During the kickoff meeting, the local chapter chair, vice-chair, and eight additional members participated. The discussions were centered on strategic initiatives to bolster APSIPA membership in Korea and augment paper submissions for the forthcoming APSIPA Annual Summit and Conference (ASC) in Macau. One of the pivotal outcomes of the meeting was the consensus to promote young professors in Korea through collaboration with local Korean research associations such as "The Korea Institute of Broadcast and Media Engineers" and "The Institute of Electronics and Information Engineers." The participants also discussed securing funding from workshops and related industries to support young researchers in actively participating in APSIPA activities. Furthermore, they planned to organize additional local events to attract more industry members.



APSIPA Korea Local Chapter Kickoff Meeting in Jeju Island, Feb. 01, 2024. From left to right: Prof. Jong Chul Yeh (KAIST), Chang-Su Kim (Korea Univ.), Nam Ik Cho (Seoul National Univ.), Chul Lee (Dongguk Univ.), Kyung Mu Lee (Seoul National Univ.), Byung Cheol Song (Inha Univ.), Je Won Kang (Ewha Womans Univ.), In Kyu Park (Inha Univ.), Boyung Han (Seoul National Univ.)

Kickoff Meeting of Thailand Chapter

Sawasdee krub ^^

This is Nipon from APSIPA Thailand Chapter. As one of the newbies of APSIPA local chapters, APSIPA Thailand Chapter was officially established in November 2023. I, Nipon Theera-Umpon, act as the Chairman of the chapter and Kampol Woradit is the Vice Chairman. Daranee Hormdee and Sutasinee Thovuttikul are the Secretary and the Treasurer, respectively. Our goals are to (1) recruit more APSIPA members in Thailand through local activities such as on-site or online seminars and social



events, etc. (2) support APSIPA related activities such as APSIPA ASC conferences, APSIPA Distinguished Lecturer Program (DLP), etc. and (3) promote activities between APSIPA local chapters, particularly among those in Asia or South East Asia.



The first kick-off event of APSIPA Thailand Chapter was successfully held on February 1, 2024, at Chiang Mai University, Thailand, under the title "The 1st APSIPA Thailand Chapter Workshop on Smart Signal Processing and Applications." In the workshop, Toshihisa Tanaka, APSIPA Vice President for Member Relations and Development, from TUAT, Japan, gave a special talk entitled "Synthesizing Speech from ECoG with a

Combination of Transformer-based Encoder and Neural Vocoder" and Kosin Chamnongthai, APSIPA Board of Governors, from KMUTT, Thailand, gave another special talk on "Visual Sensors in Digital Transformation Era." On top of that, there were 2 lectures under APSIPA Distinguished Lecturer Program, i.e., "Fuzzy Set in Data Analysis" by Sansanee Auephanwiriyakul, and "Digital Technology and A.I. Applications in Biomedicine and Healthcare" by Nipon Theera-Umpon, both from CMU, Thailand. We attracted 54 participants (44 on-site participants and 10 on-line participants) for the first official meeting of our local chapter.

Nipon Theera-Umpon, Chiang Mai University, Thailand Chair, APSIPA Thailand Chapter

APSIPA Transactions on Signal and Information Processing (A-TSIP)

1. Statistics of paper submission, acceptance and rejection in 2023.

- Total number of submissions in 2023 82
- Number of accepted papers in 2023 53 (64.6%)
- Number of rejected papers in 2023 29 (35.4%)
- Number of papers published in 2023 60

2. Statistics of paper submission, acceptance and rejection in 2024.

- Number of submissions in 2024 15*
- Number of accepted papers in 2024 10*
- Number of rejected papers in 2024 2*
- Number of papers published in 2024 11*
- Number of papers currently in production 10*
- Number of papers currently in review 12*
 - * As of 5th March 2024

3. Special issues published 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.)

4. Special issues published in 2024

• Pre-trained Large Language Models for Information Processing (Bin Wang, et al.)

5. Special issues to be published in 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.)
- Invited Papers from APSIPA ASC 2023 (Jia-Ching Wang, et al.)

6. Top 5 most cited papers from 2023.

Scopus - APSIPA Transactions on Signal and Information Processing

A Review of Speech-centric Trustworthy Machine Learning: Privacy, Safety, and Fairness

- Tiantian Feng, Rajat Hebbar, Nicholas Mehlman, Xuan Shi, Aditya Kommineni and Shrikanth Narayanan
- DOI: http://dx.doi.org/10.1561/116.00000084
- Published online: 25 Apr 2023, Vol. 12: No. 3, e17.

Federated Analytics: A Survey

- Ahmed Roushdy Elkordy, Yahya H. Ezzeldin, Shanshan Han, Shantanu Sharma, Chaoyang He, Sharad Mehrotra and Salman Avestimehr
- DOI: http://dx.doi.org/10.1561/116.00000063
- Published online: 30 Jan 2023, Vol. 12: No. 1, e4.

Is ChatGPT Involved in Texts? Measure the Polish Ratio to Detect ChatGPT Generated Text

- Lingyi Yang, Feng Jiang and Haizhou Li
- DOI: http://dx.doi.org/10.1561/116.00000140
- Published online: 03 Jan 2023, Vol. 12: No. 1, e2.

Deep Review and Analysis of Recent NeRFs

- Fang Zhu, Shuai Guo, Li Song, Ke Xu and Jiayu Hu
- DOI: http://dx.doi.org/10.1561/116.00000162
- Published online: 07 Mar 2023, Vol. 12: No. 1, e6.

Deep Active Learning for Computer Vision: Past and Future

- Rinyoichi Takezoe, Xu Liu, Shunan Mao, Marco Tianyu Chen, Zhanpeng Feng, Shiliang Zhang and Xiaoyu Wang
- DOI: http://dx.doi.org/10.1561/116.00000057
- Published online: 20 Mar 2023, Vol. 12: No. 1, e7.

7. Top 10 downloaded papers in 2023.

Deep Unsupervised Domain Adaptation: A Review of Recent Advances and Perspectives

- Xiaofeng Liu, Chaehwa Yoo, Fangxu Xing, Hyejin Oh, Georges El Fakhri, Je-Won Kang and Jonghye Woo
- DOI: http://dx.doi.org/10.1561/116.00000192
- Published online: 16 Aug 2022, Vol. 11: No. 1, e25.

Recent Advances in End-to-End Automatic Speech Recognition

- Jinyu Li
- DOI: http://dx.doi.org/10.1561/116.00000050

Deep Review and Analysis of Recent NeRFs

- Fang Zhu, Shuai Guo, Li Song, Ke Xu and Jiayu Hu
- DOI: http://dx.doi.org/10.1561/116.00000162
- Published online: 07 Mar 2023, Vol. 12: No. 1, e6.

• A Review of Speech-centric Trustworthy Machine Learning: Privacy, Safety, and Fairness

- Tiantian Feng, Rajat Hebbar, Nicholas Mehlman, Xuan Shi, Aditya Kommineni and Shrikanth Narayanan
- DOI: http://dx.doi.org/10.1561/116.00000084
- Published online: 25 Apr 2023, Vol. 12: No. 3, e17.

A Survey of Efficient Deep Learning Models for Moving Object Segmentation

- Bingxin Hou, Ying Liu, Nam Ling, Yongxiong Ren and Lingzhi Liu
- DOI: http://dx.doi.org/10.1561/116.00000140
- Published online: 03 Jan 2023, Vol. 12: No. 1, e2.

Optical Flow Regularization of Implicit Neural Representations for Video Frame Interpolation

- Weihao Zhuang, Tristan Hascoet, Xunquan Chen, Ryoichi Takashima and Tetsuya Takiguchi
- DOI: http://dx.doi.org/10.1561/116.00000218
- Published online: 14 Sep 2023, Vol. 12: No. 1, e39.

• Federated Analytics: A Survey

- Ahmed Roushdy Elkordy, Yahya H. Ezzeldin, Shanshan Han, Shantanu Sharma, Chaoyang He, Sharad Mehrotra and Salman Avestimehr
- DOI: http://dx.doi.org/10.1561/116.00000063
- Published online: 30 Jan 2023, Vol. 12: No. 1, e4.

The Future of Video Coding

- Nam Ling, C.-C. Jay Kuo, Gary J. Sullivan, Dong Xu, Shan Liu, Hsueh-Ming Hang, Wen-Hsiao Peng and Jiaying Liu
- DOI: http://dx.doi.org/10.1561/116.00000044
- Published online: 02 Jun 2022, Vol. 11: No. 1, e16.

DeepFake and its Enabling Techniques: A Review

- Rachael Brooks, Yefeng Yuan, Yuhong Liu and Haiquan Chen
- DOI: http://dx.doi.org/10.1561/116.00000024
- Published online: 28 Dec 2022, Vol. 11: No. 2, e40.

Recent Advances on Non-Line-of-Sight Imaging: Conventional Physical Models, Deep Learning, and New Scenes

- Ruixu Geng, Yang Hu and Yan Chen
- DOI: http://dx.doi.org/10.1561/116.00000019

8. Special Issues of APSIPA ASC in A-TSIP.

With the great team effort led by Prof Jia-Ching Wang (National Central University, Taiwan), a number of high-quality papers from APSIPA ASC 2023 have been selected to be submitted as a special issue (SI) for APSIPA Transactions on Signal and Information Processing (ATSIP), based upon the conference review results. The SI review and preparation process is on-going. This good practice will be continued for APSIPA ASC 2024, as confirmed by Prof Jiantao Zhou (General Co-Chair for APSIPA ASC 2024).

9. APSIPA Book Series.

The editorial board led by Prof Nam Ik Cho (Seoul National University, Korea) has received a book proposal, including a sample chapter (Introduction) and abstracts for each chapter, and the proposal has passed the comprehensive review process. Potential publishers have been contacted regarding the publication of the book. We call for more proposals for books.

APSIPA and CSIG Made MOU Agreement

The Memorandum of Understanding (MoU) Agreement is made by and between the Asia-Pacific Signal and Information Processing Association (APSIPA) and the China Society of Image and Graphics (CSIG), which was signed by Professor Mingyi He of APSIPA VP and Professor Huimin Ma of CSIG VP in January 2024.

The main purpose of the agreement is encouraging the exchange and dissemination of technical information, to promote understanding and cooperation between the members of APSIPA and CSIG, and to support the sponsored/cosponsored technical meetings and conferences of APSIPA and CSIG. Members of APSIPA may register for CSIG sponsored internationally technical meetings and conferences held in China at CSIG member rates. Members of CSIG may register for APSIPA sponsored technical meetings and conferences held in China at APSIPA member rates.

This agreement is valid for the calendar years 2024-2027 (January 1, 2024 to December 31, 2027) and may be renewed for additional four-year terms by mutual consent of both organizations.

China Society of Image and Graphics (CSIG):



CSIG is a national academic organization in China, which was established in 1990 and qualified with independent legal personal title. It consists of tens of thousands of scientists and engineers from all around the country. In addition, a large number of famous universities, research institutes and IT enterprises are group members of the society.



Signed for by CSIG:

Huimin Ma

Huimin MA
Vice President and Secretary General,
CSIG

Date: 2024-1-24

Signed for by APSIPA:

Mingyi HE

Vice President - Institutional Relations and Education Program, APSIPA

Date: 2024-01-23

VP Prof He Meeting with President-Elec Prof Gan in Singapore

APSIPA VP (IRED), Prof. He with his colleagues at Northwestern Polytechnical University visited Prof. Woon-Seng Gan (APSIPA President-Elected) at NTU on March 29, 2024 in Singapore. Prof Gan shown a very warm welcome and introduced his Smart Nation Laboratory. They had a deep discussion and show interesting in combing vision and audio technologies through artificial intelligence.

Prof Gan and Prof He also shared some of their work under their respective responsibilities for APSIPA, especially on APSIPA education program and APSIPA's promotion in China.



Prof M. He meeting with Prof W Gan



Prof M. He (Left 2) with colleagues visit Prof W. Gan's Lab (Left 3)



IMPORTANT DATES

Submission Deadline Session Proposal

Submission Deadline of Proposals for Forum, Panel and Tutorial

Submission Deadline of Regular Paper

Submission **Deadline of Special Session Paper**

Notification of Acceptance

Submission **Deadline of Camera Ready Paper**

Deadline of **Early Bird** Registration

June 17, 2024

June 17, 2024

July 21, 2024

July 21, 2024

September 23, 2024

0 October 6, 2024

October 6, 2024

INTRODUCTION

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 Taipei (2023), Chiang Mai (2022), Tokyo (2021), Auckland (2020), Lanzhou (2019), Hawaii (2018), Kuala Lumpur (2017), Jeju (2016), Hong Kong (2015), Siem Reap (2014), Kaohsiung (2013), Los Angeles (2012), Xi' an (2011), Biopolis (2010), and Sapporo (2009). APSIPA is interested in all aspects of applications. Please refer to the conference web page (www.apsipa2024.org) for full information. All accepted papers will be included in IEEE Xplore and indexed by EI, like all previous years. The technical program includes, but not limited to the following areas.

TOPICS

- 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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Overview Section Co-Chairs KokSheik Wong

TRAVELLING TO MACAU

: Macau International Airport (direct flights to many Asian cities); Hong Kong International Airport

: Gateways available from Mainland China to Macau

: Three Ferry Terminals to Hong Kong, Shenzhen, Zhuhai, etc

www.apsipa2024.org

Summary of Links

- APSIPA ASC 2024: http://www.apsipa2024.org/
- APSIPA ASC 2023: http://www.apsipa2023.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
- APSIPA Magazine: http://www.apsipa.org/doc/magazine/apsipa magazine2018.pdf
- APSIPA Photo Gallery: http://www.apsipa.org/photo/photo.htm

APSIPA Who's Who

President: Tatsuya Kawahara, Kyoto University, Japan

President-Elect: Woon-Seng Gan, Nanyang Technological University, Singapore

Past Presidents: Sadaoki Furui (2009-2012), C.C. Jay Kuo (2013-2014), Haizhou Li (2015-2016), Wan-Chi Siu (2017-2018) Hitoshi Kiya (2019-2020)

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VP - Institutional Relations and Education Program: Mingyi He, Northwestern Polytechnical University, China

VP - Member Relations and Development: Toshihisa Tanaka, To- Address: kyo University of Agriculture and Technology, Japan

VP - Publications: Weisi Lin, Nanyang Technological University, Singapore

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Nancy F. Chen, A*STAR, Singapore

Jing-Ming Guo, National Taiwan University of Science and Technology,

Yoshinobu Kajikawa, Kansai University, Japan

Kona

Sanghoon Lee, Yonsei University, Seoul, Korea KokSheik Wong, Monash University, Malaysia Shoji Makino, Waseda University, Japan Zixiang Xiong, Texas A&M University, USA Hong Vicky Zhao, Tsinghua University, China

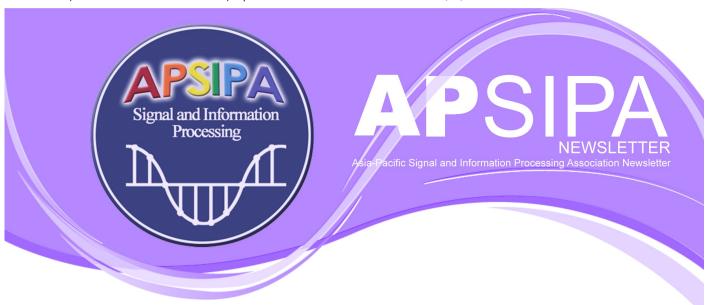
Headquarters

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Manager: Kin-Man Lam, Kenneth, email: enkmlam@polyu.edu.hk Secretary: Ngai-Fong Law, Bonnie, email: ennflaw@polyu.edu.hk



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Bonnie Law (Past Editor-in-Chief), The Hong Kong Polytechnic University, Hona Kona.

KokSheik Wong (Past Editor-in-Chief), Monash University Malaysia, Malaysia Yoshinobu Kajikawa, Kansai University, Japan.

Xie Lei, Northwestern Polytechnical University, China.

Are you an APSIPA member? If not, then register online at http://www.apsipa.org