Asia Pacific Neural Network Society

No. 3

October, 2018

APNNS NEWS



ICONIP 2018 Venue - Angkor Wat, Cambodia

APNNS NEWS

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1.President's Message



Derong Liu, President

Let me start with introducing the APNNS 2018 Executive Committee (EXCO). VP Administration is Prof. Jun Zhang of South China University of Technology. VP Finance is Prof. Seiichi Ozawa of Kobe University. VP Membership is Prof. Kevin Wong of Murdoch University. VP Conference is Prof. Minho Lee of Kyungpook National University. The President-elect is Prof. Nikola Kasabov of Auckland University of Technology. Finally, the Past President is Soo-Young Lee of KAIST.

Our planning for the year of 2018 started in Guangzhou during ICONIP 2017. We had a lot of discussions regarding how to serve our members. Plans for starting an electronic magazine, starting a winter/summer school series, and introducing outstanding PhD dissertation award were all considered.

The society's flagship event is ICONIP – International Conference on Neural Information Processing. It has been around for 24 years now. It is now mature and has entered its adulthood. We need to maintain the high standard and quality of ICONIPs, and at the same time take the lead in future technologies.

We currently have APNNS Outstanding Achievement Award, APNNS Excellent Service Award, and APNNS Young Researcher Award to recognize members with distinguished achievements and service records. Please consider to nominate your deserving colleagues for APNNS awards.

I hope you enjoy being of members of APNNS and encourage your colleagues and friends to join the society as well. We also accept student members in addition to regular members.

I look forward to seeing you all in Siem Reap, Cambodia, at ICONIP 2018.

2. Message from the President-elect

APNNS – A long term development in the future



Nikola Kasabov, APNNS President-elect

I see APNNS, not only continuing the strong traditions in science, education and industry applications of neural networks and intelligent systems, established by the Asia-Pacific Neural Network Assembly (APNNA) 25 years ago, but moving forward to a next level, with a stronger impact on the societies, the education and industry sectors across the Asia-Pacific area and internationally.

This is especially in time when neural networks (NN) and deep-learning machines have already become the state-of-the-art in artificial intelligence (AI). NN and AI alone are predicted to contribute by 2030 from 10% to 26% of the GDP of each of the countries which embrace them. And APNNS can help all countries in the Asia-Pacific region to embrace NN and AI for their own benefit, growth and wellbeing of their societies.

APNNS has leadership provided by the previous and the current Presidents and the society will continue with this tradition. My view is that in both short term and longer terms in the future, APNNS will target and will achieve the following goals:

- 1) Become truly Inclusive, Interdisciplinary and International society.
- 2) Become a world leader in the development of new NN and AI methods, systems, and technologies.
- 3) Increase the membership to 6,000 members by end of 2022.
- 4) Enable a strong interaction between members by establishing a quarterly online magazine, where members can share news, projects, job and scholarship announcements.
- 5) Start an Asia-Pacific joint project across all member countries/regions on 'Brain and neural networks'.
- 6) Continue the successful ICONIP conferences and turn them to a major international event in the field.
- 7) Attract young researchers and high school students through special events during ICONIP conferences.
- 8) Maintain the spirit of friendship, democracy, collaboration and mutual respect across all member countries/regions and individual members.

9) Become the consciousness of the societies for their endeavor for the use of new technologies for piece and human benefits, preventing the use of AI for destruction of the humanity.

My previous experience as twice Past President of APNNA and a Past President of the International Neural Network Society (INNS) makes me confident that APNNS can achieve its goals in the future.

Professor Nikola Kasabov is Fellow of IEEE, Fellow of the Royal Society of New Zealand, Fellow of the NZ Institute of IT Professionals NZ, Distinguished Fellow of the Royal Academy of Engineering and the Scottish Computer Society, UK. He is the Director of the Knowledge Engineering and Discovery Research Institute (KEDRI) at Auckland University of Technology. He holds a Chair of Knowledge Engineering at the School of Engineering, Computing and Mathematical Sciences at AUT.

Kasabov has been twice President of the Asia Pacific Neural Network Society (APNNA) (1997 and 2008) and currently a Board member of APNNAS. He was a Past President (2009 and 2010) and Board of Governors Member of the International Neural Network Society (INNS). He is a Co-Editor-in-Chief of the Springer journal Evolving Systems and serves as Associate Editor of Neural Networks, of several IEEE Transactions, Information Sciences, Applied Soft Computing and other journals.

Kasabov holds MSc and PhD from the TU Sofia, Bulgaria. His main research interests are in the areas of neural networks, computational intelligence, soft computing, bioinformatics, neuroinformatics. Prof. Kasabov has originated several groundbreaking theores and methods, such as: evolving connectionits systems; hybrid evolving neuro-fuzzy systems; evolving spiking neural netrowks; brain-like spatio-temporal machine NeuCube; quantum inspired evolutionary computaion; methods for brain data modelling; personalised modelling methods. He has published more than 600 publications that include 12 books, 200 journal papers, 28 patents. His work has been cited widely

(https://scholar.google.com/citations?user=YTa9Dz4AAAAJ) and has a significant impact on the development of methods and systems of computaionla intelligence world-wide.

Prof. Kasabov has extensive academic experience at various academic and research organisations internationally, including: TU Sofia, Bulgaria; University of Essex UK; University of Otago NZ; Advisor Professor at the Shanghai Jiao Tong University and NTT University Vietnam; Visiting Professor at ETH/University of Zurich and RGU Scotland, Honorary Member of the Bulgarian Academic Computer Society and of the Greek Computer Society.

For his achievements Prof. Kasabov has received numerous awards, including: INNS Ada Lavelace Meritorious Contribution Award (2018); APNNA 'Outstanding Achievements Award' (2012); INNS Gabor Award for 'Outstanding contributions to engineering applications of neural networks' (2011); EU Marie Curie Fellowship (2011-2012); Bayer Science Innovation Award; APNNA Excellent Service Award; RSNZ Science and Technology Medal; 2015 Auckland University of Technology highest award – the University Medal. He has supervised to completion 42 PhD students. He has presented more than 60 plenary and invited talks at international conferences. More information of Prof. Kasabov can be found on the KEDRI web site: http://www.kedri.aut.ac.nz.

3. Society Structure: Board of Governors

Jun Zhang, VP Administration



One of the major achievements of my predecessors is the development of APNNS Bylaws which defines the governing board structure of our society. To reflect the diversity and also balance in the Asia-Pacific region, the bylaws set specific guidelines to make up of the two-class governing board members with the Elected Governors and Country/Region Governors. The Elected Governors are elected from the general pool of available members. Moreover, the maximum authorized number shall not be more than 12 and the maximum authorized number of Elected Governors for each country/region shall not be more than two. Country/Region Governors shall be recommended by Countries/Regions-at-Large, defined as the countries/regions whose regular members are more than a certain number as specified by the Governing Board. The authorized number of Country/Region Governors for a Country/Region-at-Large shall not be more than one. Lastly, the number of Countries/Regions-at-Large may be varied from time to time by resolution of the Board of Governors, provided that the authorized number of Elected Governors and Country/Region Governors in total shall be around 25. With this structure, APNNS aims to be inclusive and at the same time sensitive to the various needs of the representations of its members.

We have also expanded and further clarified the roles of the APNNS Executive Committee (EXCO), which consists of the President, the President-elect, and four Vice-presidents (VPs), VP of Administration, VP of Finance, VP of Membership, and VP of Conference to oversee the day-to-day operation of APNNS. The President and President-elect shall hold office for the term of one year, starting on January 1 of the year.

It is our hope and belief that with this new structure, APNNS will continue to foster strong supports from its members of diverse communities to expand and develop successfully the field of neural networks, computational intelligence, and other related fields in the years to come. (texts adapted from Irwin King, the former VP of Administration)

3.1 APNNS President and EXCO (2018)



Derong Liu President School of Automation Guangdong University of Technology Email: derongliu [at] foxmail.com



Nikola Kasabov President-Elect KEDRI Auckland University of Technology Email: nkasabov [at] aut.ac.nz



Soo-Young Lee Immediate Past President Department of Electrical Engineering KAIST Email: sylee [at] kaist.ac.kr



Jun Zhang Vice-President for Administration School of Computer Science and Engineering South China University of Technology Email: csjun [at]scut.edu.cn



Seiichi Ozawa Vice-President for Finance Graduate School of Engineering Kobe University Email: ozawasei [at] kobe-u.ac.jp



Kevin Wong Vice-President for Membership School of Engineering and Information Technology Murdoch University Email: k.wong [at] murdoch.edu.au



Minho Lee Vice-President for Conferences School of Electronics Engineering Kyungpook National University Email: mholee [at] gmail.com

3.2 Elected Governors 2018–19



Sabri Arik Department of Computer Engineeing Istanbul University Email: ariks [at] istanbul.edu.tr



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Zhigang Zeng School of Automation Huazhong University of Science and Technology Email: zgzeng [at] hust.edu.cn

3.3 Country/Region Governors 2018–19



Tom Gedeon (Australia) School of Computer Science Australian National University Email: tom [at] cs.anu.edu.au



Nikola Kasabov (Oceania: New Zealand + Fiji) KEDRI Auckland University of Technology Email: nkasabov [at] aut.ac.nz



Irwin King (Hong Kong) Department of Computer Science & Engineering Chinese University of Hong Kong Email: king [at] cse.cuhk.edu.hk



Weng Kin Lai (Malaysia) Department of Electrical & Electronic Engineering Tunku Abdul Rahman University College Email: laiwk [at] acd.tarc.edu.my



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Jun Zhang (China) School of Computer Science and Engineering South China University of Technology Email: csjun [at]scut.edu.cn

4. Society Membership



Kevin Wong, VP Membership

4.1 Information and Update

Asia Pacific Neural Network Society (APNNS) was formally established in November 2015. Since 2016, the total number of regular and student APNNS members has grown from 363 to current 556 members. The number of members is still increasing. APNNS continues to seek more active participation from researchers and professionals in the Asia Pacific region to share, contribute, and to advance the state of knowledge in the theoretical modelling and analysis of the brain processes and their applications in technology. APNNS also promotes active interactions among researchers, scientists, and industry professionals who are working in the areas of Neural Networks and related fields in the Asia-Pacific region.

Currently our active members are distributed from regions like Australia, China, Hong Kong, India, Japan, Malaysia, New Zealand, Qatar, Saudi Arabia, Singapore, South Korea, Taiwan, Thailand, Tunisia, Turkey, and UAE. We also have members from countries in other regions of the world.

For a list of current APNNS board of governors, it is available at http://www.apnns.org/bog.html. There are currently 9 country/region governors represented on the board of governors. If you have any suggestion and ideas of growing the membership or increase the relevant activities in your country or region, feel free to drop them a line for further discussions. We encourage greater participation from any growing region/country located in Asia Pacific. You can visit http://www.apnns.org/bylaws.html to look at the bylaws outlining the possible formation of country or region in the board of governors.

The flagship conference organised by APNNS every year is the International Conference on Neural Information Processing (ICONIP). The ICONIP 2018 will be held in Siem Reap, Cambodia; and the ICONIP 2019 will be held in Sydney, Australia. The APNNS annual meeting will also be held during the ICONIP. We encourage all members to attend to exchange ideas and further develop the communities in the Asia Pacific region.

4.2 How to Join APNNS

The annual APNNS membership fee is

Regular: 15 USD Student: 10 USD

To apply for the APNNS membership, please send an email to membership@apnns.org with the following information.

To: membership@apnns.org Subject: Membership Application

Name (LAST/First): Affiliation: Email Address: Country or Region of your Institute: Membership Class: Regular or Student.

Then, we will send you an invoice that is payable through PayPal. Your membership will be activated upon the receipt of payment. A student must send the copy of student ID card or a student certificate with the signature of a school dean.

• JNNS Members

The members of Japanese Neural Network Society will have a special arrangement of the APNNS membership fee by JNNS. Please contact <u>the JNNS office</u>. http://www.jnns.org/

• Affiliation Change and Further Information

For your affiliation change and further inquiry, please contact us at membership@apnns.org .

5. Call for Bids – ICONIP 2020 and/or 2021



Minho Lee, VP Conference

26th and/or 27th International Conference on Neural Information Processing

The International Conference on Neural Information Processing (ICONIP) hereby invites proposals to host the conference in the Asia-Pacific region in October, November or December, 2020 and/or 2021. We seek draft proposals from prospective bidders in the Asia-Pacific region. The APNNS (Asia-Pacific Neural Network Society) GB members will select the General Chair by voting.

Bid Highlights: Draft proposals include information on the following:

- Location (accessibility; conference venue, e.g., convention center, hotel or university; accommodation; dining options).
- Proposed dates. Religious and local national holidays should be avoided, as much as possible.
- Local arrangements team (chair/co-chair, committee, volunteer labor, registration handling; describing any experience the team has had in organizing previous conferences and the number of participants at those conferences).
- Meeting venues (space for sessions, tutorials, workshops, posters, exhibits, demos, small meetings and registration).
- High-speed, all-ports-open, easy-to-use internet access.
- Audiovisual equipment.
- Catering, including breaks, receptions, poster sessions, banquet and entertainment (traditionally, dancing for participants at the banquet).
- Local sponsorships.
- Local expenses estimates spreadsheet (using template provided, link above).

Important Dates:

- End of November, 2018: Final draft due day for bidders.
- Middle of December 2018 (APNNS GB meeting): Bid selected by voting.

The selected location for ICONIP2020 and/or 2021 will be announced at the ICONIP2018 conference (Siem Reap, December 13 – December 16, 2018).

For any queries please contact Minho Lee, the Vice President (VP) for conference.

Please send your draft proposals (ppt slides and/or document) to email: mholee@gmail.com

6. ICONIP 2018 Information



Jun Wang, General Chair of ICONIP 2018

6.1 Call for Participation



International Conference on Neural Information Processing (ICONIP) is the flagship conference and the largest technical event of Asia-Pacific Neural Network Society (APNNS). It covers a wide range of topics in the field of neural networks from artificial neural computation to biological neural network modeling. It aims to provide a high-level international forum for scientists, engineers, and educators all over the world to discuss and present the state of the art of research and applications in neural networks and related fields.

ICONIP 2018 is to be held in Siem Reap, Cambodia during December 13–16, 2018. December 13, 2018, Thursday (whole day) will be the day of ICONIP 2018 registration. The conference starts on Friday, December 14. The conference banquet will be in evening of Saturday, December 15. The last day of the conference is Sunday, December 16. Siem Reap is the capital city of Siem Reap Province in northwestern Cambodia. It is an ideal conference destination with a large number of hotels, resorts, restaurants, and shops, and it is a gateway to Angkor Wat, which is one of the most important archaeological sites in South-East Asia, the largest religious monument in the world, and listed by UNESCO as a cultural heritage.

ICONIP 2018 received 575 submissions from 51 countries and regions worldwide and only 400 papers were accepted. Three most popular topics in submission were "deep learning", "supervised learning" and "image and signal processing". Based on these

statistics, it can be expected that the technical program will cover a wide range of subjects that address the hottest topics in the neural network field. In addition, the conference will also feature plenary talks given by world renowned scholars and workshops/tutorials delivered by experienced speakers. Following the tradition of ICONIP series, Best Paper Award and Best Student Paper Award will be selected based on the paper's quality and the conference presentation.

Apart from the technical program, participants are also cordially invited to attend various social events that will include reception, lunches, and banquet. In addition, participants are also encouraged to explore the beautiful city of Siem Reap and the historical site of Angkor Wat which have many attractions and things to see and to do.

We look forward to seeing you all at ICONIP2018 in Siem Reap!

6.2 Organizing Committee

General Chair

Jun Wang,	City University of Hong Kong, Hong Kong
Advisory Chairs	
Akira Hirose,	University of Tokyo, Tokyo, Japan
Soo-Young Lee,	Korea Advanced Institute of Science and Technology,
	Daejeon, Korea
Derong Liu,	Institute of Automation, Chinese Academy of Sciences,
	Beijing, China
Nikhil R. Pal,	Indian Statistics Institute, Calcutta, India

Program Chairs

Long Cheng,	Institute of Automation, Chinese Academy of Sciences,
	Beijing, China
Andrew C.S. Leung,	City University of Hong Kong, Hong Kong
Seiichi Ozawa,	Kobe University, Kobe, Japan

Special Sessions Chairs

Shukai Duan,	Southwest University, Chongqin	g, China
Kazushi Ikeda,	Nara Institute of Science and Tec	chnology, Nara, Japan
Qinglai Wei,	Institute of Automation, Chinese Academy of Sciences,	
	Beijing, China	
Hiroshi Yamakawa,	DWANGO Co. Ltd., Tokyo, Japa	an
Zhi-Hui Zhan,	South China University of Techn	ology, Guangzhou, China
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Tutorial Chairs

Hiroaki Gomi,	NTT Communication Science Laboratories, Atsugi-shi,
	Japan
Takashi Morie,	Kyushu Institute of Technology, Kitakyushu, Japan
Kay Chen Tan,	City University of Hong Kong, Hong Kong
Dongbin Zhao,	Institute of Automation, Chinese Academy of Sciences,
	Beijing, China

Publicity Chairs

Institute of Automation, Chinese Academy of Sciences,
Beijing, China
Texas A&M University at Qatar, Doha, Qatar
National Chung-Hsing University, Taichung, Taiwan
Kyushu Institute of Technology, Kitakyushu, Japan

Publications Chairs

Xinyi Le,	Shanghai Jiao Tong University, Shanghai, China
Sitian Qin,	Harbin, Institute of Technology – Weihai, Weihai, China
Zheng Yan,	University Technology Sydney, Sydney, Australia
Shaofu Yang,	Southeast University, Nanjing, China

Registration Chairs

Shenshen Gu,	Shanghai University, Shanghai, China
Qingshan Liu,	Southeast University, Nanjing, China
Ka Chun Wong,	City University of Hong Kong, Hong Kong

Secretariat

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Dalian University of Technology, Dalian, China Email: iconip@cs.cityu.edu.hk

Sponsor/ Organizer:

Technical co-sponsors:



NEURAL NETWORK SOCIETY (INNS)



International Neural Network Society

Japanese Neural Network Society

APNNS NEWS

6.3 Sightseeing

Siem Reap is the capital city of Siem Reap Province in northwestern Cambodia. It is a popular resort town and a gateway to the Angkor region.

Siem Reap has colonial and Chinese-style architecture in the Old French Quarter, and around the Old Market.



In the city, there are museums, traditional Apsara dance performances, a Cambodian cultural village, souvenir and handicraft shops, silk farms, rice-paddies in the countryside, fishing villages and a bird sanctuary near the Tonle Sap Lake.



Siem Reap today-being popular tourist a destination-has a large number of hotels, resorts, restaurants and businesses closely related to tourism. This is much owed to its proximity to the Angkor temples, the most popular tourist attraction in Cambodia.

More information about Angkor can be found at the following sites:

https://en.wikipedia.org/wiki/Siem_Reap https://wikitravel.org/en/Siem_Reap

6.4 History

24th International Conference on Neural Information Processing, Guangzhou, China, 2017

23rd International Conference on Neural Information Processing, Kyoto, Japan, 2016

22nd International Conference on Neural Information Processing, Istanbul, Turkey, 2015

21st International Conference on Neural Information Processing, Kuching, Sarawak, Malaysia, 2014

20th International Conference on Neural Information Processing, Daegu, Korea, 2013

19th International Conference on Neural Information Processing, Doha, Qatar, 2012

18th International Conference on Neural Information Processing, Shanghai, China, 2011

17th International Conference on Neural Information Processing, Sydney, Australia, 2010

16th International Conference on Neural Information Processing, Bangkok, Thailand, 2009

15th IInternational Conference on Neural Information Processing, Auckland, New Zealand, 2008

14th International Conference on Neural Information Processing, Kitakyushu, Japan, 2007

13th International Conference on Neural Information Processing, Hong Kong, 2006

12th International Conference on Neural Information Processing, Taipei, 2005

11th International Conference on Neural Information Processing, Calcutta, India, 2004

10th International Conference on Neural Information Processing, Istanbul, Turkey, 2003

9th IInternational Conference on Neural Information Processing, Singapore, 2002

8th International Conference on Neural Information Processing, Shanghai, China, 2001

7th International Conference on Neural Information Processing, Taejon, Korea, 2000

6th International Conference on Neural Information Processing, Perth, Australia, 1999

5th International Conference on Neural Information Processing, Kitakyushu, Japan, 1998

4th International Conference on Neural Information Processing, Dunedin, New Zealand, 1997

3rd International Conference on Neural Information Processing, Hong Kong, 1996

2nd International Conference on Neural Information Processing, Beijing, China, 1995

1st International Conference on Neural Information Processing, Seoul, Korea, 1994