

# APNNS NEWS



ICONIP 2019 Venue - Sydney, Australia

# APNNS NEWS

No. 4 (June 2019)

## CONTENTS

<b>1. President's Message .....</b>	<b>1</b>
<b>2. Society Membership.....</b>	<b>4</b>
2.1 Information and Update .....	4
2.2 How to Join APNNS.....	5
<b>3. Conferences and Meetings.....</b>	<b>6</b>
3.1 ICONIP 2018 .....	6
3.2 ICONIP 2019 .....	7
3.3 ICONIP 2020 and ICONIP2021 .....	8
3.4 ICONIP 2022 and beyond .....	8
3.5 Call for Participation.....	9
<b>4 ICONIP 2019 Information .....</b>	<b>11</b>
4.1 Topics .....	11
4.2 Organizing Committee.....	12
4.3 Timeline and Submission .....	13
4.4 History .....	14

# 1. President's Message



**Prof. Nikola Kasabov, President**

APNNS is a society that is 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) 26 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 is targeting an achieving the following goals:

- 1) To be truly Inclusive, Interdisciplinary and International society.
- 2) To be a world leader in the development of new NN and AI methods, systems, and technologies.
- 3) To increase its membership attracting more members from the industry.
- 4) To enable a strong interaction between members by continuing the publications of an on-line magazine, where members can share news, projects, job and scholarship announcements.
- 5) To continue the successful ICONIP conferences as major international events in the field.
- 6) To attract young researchers and high school students through special events during ICONIP conferences, such as competitions.
- 7) To maintain the spirit of friendship, democracy, collaboration and mutual respect across all member countries and individual members.
- 8) To become the consciousness of the societies for their endeavor for the use of new technologies for peace and human benefits, preventing the malicious use of AI.

APNNS has a strong leadership provided by the Board of Governors:



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



**Tingwen Huang**  
**President Elect**  
Faculty of Science  
Texas A&M University at Qatar  
Email: tingwen.huang [at] qatar.tamu.edu



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



**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 Fianance**  
Graduate School of Engineering  
Kobe University  
Email: ozawasei [at] kobe-u.ac.jp



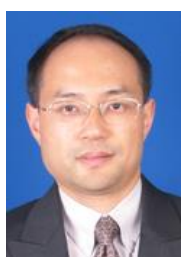
**Kevin Wong**  
**Vice-President for Membership**  
School of Engineering and Information  
Technology  
Murdoch University  
Email: k.wong [at] murdoch.edu.au



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



**Sung-Bae Cho**  
**Vice-President for Industry  
Relations**  
Department of Computer Science  
Yonsei University  
Email: sbcho [at] cs.yonsei.ac.kr



**Jonathan H. Chan**  
**Vice-President for Education**  
School of Information Technology  
King Mongkut's University of  
Technology  
Email: jonathan [at] sit.kmutt.ac.th



**Paul Pang**  
**Vice-President for Competitions**  
Department of Computing  
Unitec Institute of Technology  
Email: jonathan [at] sit.kmutt.ac.th



**James Kwok**  
**Vice-President for Publications**  
Department of Computer Science and  
Engineering  
Hong Kong University of Science and  
Technology  
Email: jamesk [at] cse.ust.hk

We wish all APNNS members successful and productive work and will welcome new members to our society! Please follow our activities at the APNNS Web site: <http://www.apnns.org>

---

**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.

He has published more than 600 publications that include 12 books, 200 journal papers, 28 patents. His work has been cited widely and has a significant impact on the development of methods and systems of computational intelligence world-wide. He is also Visiting Professor at Shanghai JiaoTong University and RGU UK.

---

## 2. Society Membership



**Kevin Wong, VP Membership**

### 2.1 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 continue 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 promote 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 was held in Siem Reap, Cambodia and the ICONIP 2019 will be held in Sydney, Australia. The APNNS annual meetings are also held during the ICONIP. We encourage all members to attend to exchange ideas and further develop the communities in the Asia Pacific region.

## 2.2 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 the JNNS office. <http://www.jnns.org/>

- **Affiliation Change and Further Information**

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



## 3. Conferences and Meetings



**Minho Lee, VP Conferences**

### 3.1 ICONIP 2018

The 25th International Conference on Neural Information Processing (ICONIP 2018) was held at the Sokha Siem Reap Resort & Convention Center, Siem Reap, Cambodia during December 13 - 16, 2018, following the successes of previous events. We had three plenary speakers including Prof. Marios M. Polycarpou, Prof. Masashi Sugiyama, Prof. Qing-Long Han, Prof. Cesare Alippi and Prof. Nikola Kasabov are the invited speakers. ICONIP2018 received 575 submissions from 51 countries and regions across six continents. Based on a rigorous peer review process by at least three reviewers per a paper, 401 high quality papers were accepted for publication in Springer Lecture Notes in Computer Sciences and presented at 6 parallel sessions in 3 full days followed by the welcome reception. We also had related events including two conferences (9th International Conference on Intelligent Control and Information Processing, 11th International Conference on Advanced Computational Intelligence), one symposium (International Symposium on Neural Networks) and one competition (International Cybersecurity Data Mining Competition).





## 3.2 ICONIP 2019

The 26th International Conference on Neural Information Processing (ICONIP 2019) will be held in Sydney, Australia. Sydney, capital of New South Wales and one of Australia's largest cities, is best known for its harbourfront Sydney Opera House, with a distinctive sail-like design. Massive Darling Harbour and the smaller Circular Quay port are hubs of waterside life, with the arched Harbour Bridge and esteemed Royal Botanic Garden nearby. Sydney Tower's outdoor platform, the Skywalk, offers 360-degree views of the city and suburbs.

ICONIP 2019 aims to provide a high-level international forum for scientists, engineers, educators and students worldwide to present the state of the art of research results and applications in related fields of neural information processing and applications. ICONIP2019 will feature plenary speeches given by world renowned scholars, regular sessions with broad coverage. The conference aims to bring together the researchers in current research topics by organizing special sessions and tutorial topics in related areas.



ICONIP2019 invites contributions in the related areas by the submission deadline through the online submission system. The submission of a paper implies that the paper is original and has not been submitted under review or is not copyright-protected elsewhere and will be presented by an author if accepted. Authors are requested to submit full-length papers (12 pages maximum) which will be refereed by experts in the field based on the criteria of originality, significance, quality, and clarity. The authors of accepted papers will have an opportunity to revise their papers and take consideration of the referees' comments and suggestions. The Proceedings will be published in the Springer's series of Lecture Notes in Computer Science. Selected papers will be published in a special issue of an SCI journal.

Please view the details of the conference at <http://ajiiips.com.au/iconip2019/index.html>.

### 3.3 ICONIP 2020 and ICONIP2021

The APNNS board of governors are pleased to announce the locations of ICONIP 2020 in HongKong, China and ICONIP 2021 in Bali, Indonesia.



### 3.4 ICONIP 2022 and beyond

If you would like to organize ICONIP2022, the main conference of APNNS, please prepare a proposal according to the following guidelines:

- \* List of organizing committee members; biosketch of key organizing committee members
- \* Location and date of the conference; venue, transportation, sightseeing
- \* Program highlights;
- \* Budget plan; registration fee structure.

Please submit your proposal to APNNS Vice President for Conferences, Minhoo Lee ([mholee@gmail.com](mailto:mholee@gmail.com)).

### 3.5 Call for Participation



You are cordially invited to submit papers to the 12th International Workshop on Artificial Intelligence and Cybersecurity (AICS 2019) and participate in the 10th International Cybersecurity Data Mining Competition (CDMC 2019). The two events are associated with the 26th International Conference on Neural Information Processing (ICONIP 2019), Sydney, Australia, December 12-15, 2019. AICS 2019 and CDMC 2019 award ceremony will be both co-held with ICONIP 2019. For more information on venue, accommodation, and travel, please refer to the conference website at <http://ajjiips.com.au/iconip2019/>.

#### **AICS 2019 Call for Workshop Papers:**

The 12th International Workshop on Artificial Intelligence and Cybersecurity (AICS 2019) was previously the International Data Mining and Cybersecurity Workshop (DMC) which has been held for ten consecutive years. The purpose of AICS is to raise the awareness of cybersecurity, promote the potential of industrial applications, and give young researchers exposure to the key issues related to the topic and to ongoing works in this area. AICS 2019 will provide a forum for researchers, security experts, engineers, and students to present latest research, share ideas, and discuss future directions in the fields of data mining and cybersecurity.

**Paper Submission and Publication:** Authors are invited to submit papers on novel and mature work, of up to 8 pages in Springer LNCS format (with up to 2 additional pages for an extra charge). Please submit your papers via the ICONIP 2019 submission website, indicating the paper is devoted to AICS 2019 in the option list. All accepted papers will be published in the proceeding of ICONIP 2019, an LNCS publication with Springer.

#### **CDMC2019 Call for Competition Participants:**

The 10th International Cybersecurity Data Mining Competition (CDMC 2019) at ICONIP 2019 is a challenging, multi-month research and practice competition, focusing on application of knowledge discovery techniques to solve advanced, real-world problems. The competition is open to multi-person teams worldwide. Contestants are invited to participate in solving a set of problems in fields of cybersecurity, text mining, image processing, etc. For more information, including registration details, detailed problem descriptions, and contest rules please refer to the official contest website at <http://www.csmining.org/>.

**Prizes and Awards:** We have set cash prizes for the competition. The top rank teams of all data mining tasks will be eligible to win a cash prize of NZ \$3000. Additional prizes may be available as travel grants for deserving participants to help them attend the ICONIP 2019 and AICS 2019 in Australia. The award ceremony of the competition will be held at the grand banquet of ICONIP 2019, where the winner of the CDMC 2019 will be awarded in front of all the audience and honourable guests of the conference.

## Organizing Chairs

Iqbal Gondal,	Australia
Youki Kadobayashi,	Japan
Tao Ban,	Japan
Paul S. Pang,	New Zealand
Kaizhu Huang,	China
Jungsuk Song,	Korea
Poh Geong Sen,	Singapore
Kitsuchart Pasupa,	Thailand

## Advisory Committee

Jun Wang,	Hong Kong
Changshui Zhang,	China
Derong Liu,	China
Irwin King,	Hong Kong
Lipo Wang,	Singapore
Nik Kasabov,	New Zealand
Tingwen Hwang,	Qatar
Tom Gedeon,	Australia
Yoichi Shinoda,	Japan
Jonathan Chan,	Thailand
Hossein Sarrafzadeh,	USA
Baoliang Lu,	China

## Sponsors:



## Dates for Workshop

Paper submission:  
June 15, 2019  
Notification of acceptance:  
August 1, 2019  
Camera-ready submission:  
September 01, 2019  
Early registration:  
August 7, 2019  
Workshop date:  
December 11, 2019

## Dates for Competition

Competition starts:  
July 15, 2019  
Competition closes:  
October 30, 2019  
Winner announcement and  
award ceremony:  
December 14, 2019

# 4 ICONIP 2019 Information



**Tom Gedeon, General Chair of ICONIP 2019**

## 4.1 Topics

The 26th International Conference on Neural Information Processing (ICONIP2019) aims at presentation of professional research results and enthusiastic discussions among researchers, scientists, and industry professionals who are working in neural network, deep learning and related bio-inspired computing fields. The theme of the conference is Human Centred Computing: use of human sensor data to predict or model human emotion, intentions and goals with an overall aim to produce computer systems which are useful, usable and sympathetic to users. Papers matching the theme are particularly encouraged.

Suggested topics for the conference include, but are not limited to neural networks, deep learning, bio-inspired computing and the following topics: >

### **A. Theory and Algorithms**

- A1. Neurodynamics
- A2. Machine learning
- A3. Deep neural networks
- A4. Computational intelligence
- A5. Computer vision
- A6. Pattern recognition
- A7. Speech processing
- A8. Time series analysis
- A9. Reinforcement learning
- A10. Bayesian networks

### **B. Computational and Cognitive Neurosciences**

- B1. Sensory perception
- B2. Motor control
- B3. Decision making
- B4. Social cognition
- B5. Emotion and reward
- B6. Neuroeconomics
- B7. Computational psychiatry
- B8. Brain-machine interface
- B9. Biometric systems/interfaces
- B10. Neural data analysis

### **C. Human Centred Computing and Applications**

- C1. Big data analysis
- C2. Robotics and control
- C3. Bioinformatics
- C4. Biomedical engineering
- C5. Neuromorphic hardware
- C6. Data mining
- C7. Information security
- C8. Social networks
- C9. Computational finance
- C10. Sports and rehabilitation

## 4.2 Organizing Committee

### General Chair

Tom Gedeon, Australia

### Senior Program Committee and Advisory Board

Akira Hirose,	Japan
Andrew Chi-Sing Leung,	Hong Kong
Baoliang Lu,	China
Chee Peng Lim,	Australia
Chu Keong Loo,	Malaysia
Derong Liu,	China
Hye Young Park,	Korea
Irwin King,	China
James Kwok,	Hong Kong
John Sum,	Taiwan
Jonathan Chan,	Thailand
Jun Wang,	China
Jun Zhang,	China
Kay Chen Tan,	Hong Kong
Kazushi Ikeda,	Japan
Kevin Wong,	Australia
Ko Sakai,	Japan
Kitsuchart Pasupa,	Thailand
Marios Polycarpou,	Cyprus
Minho Lee,	Korea
Nikhil R. Pal,	India
Nikola Kasabov,	New Zealand
Paul Pang,	New Zealand
Robert Kozma,	USA
Sabri Arik,	Turkey
Seiichi Ozawa,	Japan
Soo-Young Lee,	Korea
Sung-Bae Cho,	Korea
Takashi Omori,	Japan
Tom Gedeon,	Australia
Zhigang Zeng,	China
Weng Kin Lai,	Malaysia

### Program Committee Chairs

Kevin Wong,	Australia
Minho Lee,	Korea
Tom Gedeon,	Australia



## Publicity Chairs

Kevin Wong,                      Australia  
Sukanya Manna,                USA

## Local Arrangements

Matloob Khushi,                Australia  
Mukesh Prasad,                Australia  
Tom Gedeon,                    Australia

## Sponsors:



## 4.3 Timeline and Submission

### Important Dates:

Special session proposals submission due ..... 30 May 2019  
Full Paper submission due..... 15 June 2019  
Notification of acceptance..... 1 August 2019  
Camera-ready copy and author registration..... 1 September 2019

**Online submission:** <https://easychair.org/my/conference?conf=iconip2019>

**Important: submissions should be in the Springer conference format**

Paper submissions and publications: General stream conference papers **should be submitted online following the Springer LNCS format**. Papers for special sessions and for workshops are submitted in same way as general papers in the targeted session. Papers will be published by the LNCS Springer series, and in the Australian Journal of Intelligent Information Processing Systems (AJIIPS). Selected and extended papers will be published in special issues of journals after the conference.

Final papers after acceptance will normally be 10 pages up to be a maximum of 12 pages in length.



## 4.4 History

25th International Conference on Neural Information Processing, Siem Reap, Cambodia, 2018

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 International 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 International 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