



The Institute of Electrical and Electronics Engineers, Inc.

## VOLUME 44 Issue 3

October 2015

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**Editorial:** This is the third newsletter I've edited. This one is being edited with newly downloaded copy of the very latest version of Libre Office - 4.4.5, which doesn't mean that I'll be able to process .docx submissions – if they come in as .docx, they get translated to .doc.

This newsletter is coming out earlier than originally planned to cover the Annual General Meeting.

Do try to get to the 6.00pm to 7.00pm slot for the Chapter and Affinity Groups AGMs. They don't do much, but we can claim them as an Affinity Group activity and get money back from the IEEE head office on the basis that our Affinity Groups have logged up enough activities in 2015 to satisfy their official requirements. And if enough people attend and have something to say, the Affinity Group may find some useful activity to undertake.

## IEEE NSW Section 2015 AGM and Dinner– RSVP Form

**Date:** Friday, 20 November 2015

<b>Time:</b>	6pm to 7pm	Chapter and Affinity Group AGMs
	7pm to 8pm	NSW Section AGM
	8:35pm till late	NSW Section Dinner

**AGM Venue:** Hilton Sydney,  
488 George Street, Sydney, NSW, 2000, Australia  
phone: (02) 9266 2000  
<http://www.hiltonsydney.com.au/directions-map>

**Dinner Venue:** Braza Brazilian Restaurant Darling Harbour,  
1-25 Harbour St Darling Harbour  
phone: (02) 9286 3733  
<http://www.braza.com.au/location/location-darling-harbour/>

**Car Parking:** For Car Parking please see:  
<http://www.wilsonparking.com.au/go/regions/sydney-city-south>  
<http://www.cityofsydney.nsw.gov.au/AboutSydney/ParkingAndTransport/CityParking/CarParks.asp>

**RSVP:** Friday **13 November 2015**  
Please E-mail the completed RSVP form to Bruce Poon: [Bruce.Poon@IEEE.org](mailto:Bruce.Poon@IEEE.org)  
or phone: 0414 662 766

***IEEE NSW Section will cover the cost of yours and your partners' dinner (drinks excluded) for all registrations received before the RSVP date above. However, for those no show at the event, then \$80 per person will be charged to your credit card.***

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## Reservation Form for IEEE NSW Section AGM & Dinner 2015

Name: .....

Attending: AGM ..... Dinner..... (Yes/No as applicable)

Vegetarian: ..... (Yes/No as applicable)

Tel: ..... email: .....

Membership No.: .....

Partner Attending: ..... (Yes/No as applicable)

Partner's Name: .....

Attending: AGM ..... Dinner..... (Yes/No as applicable)

Vegetarian: ..... (Yes/No as applicable)

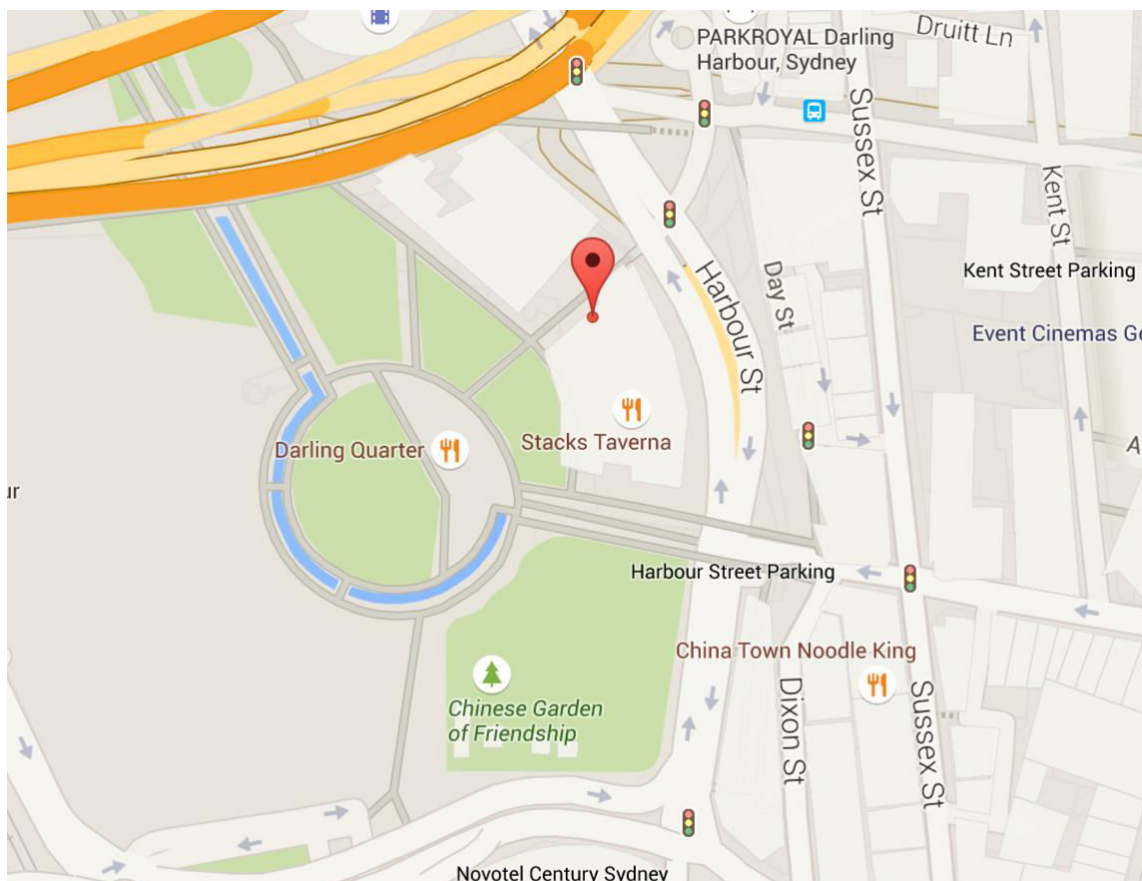
Name on the Credit Card: .....

\*Credit Card No.: .....

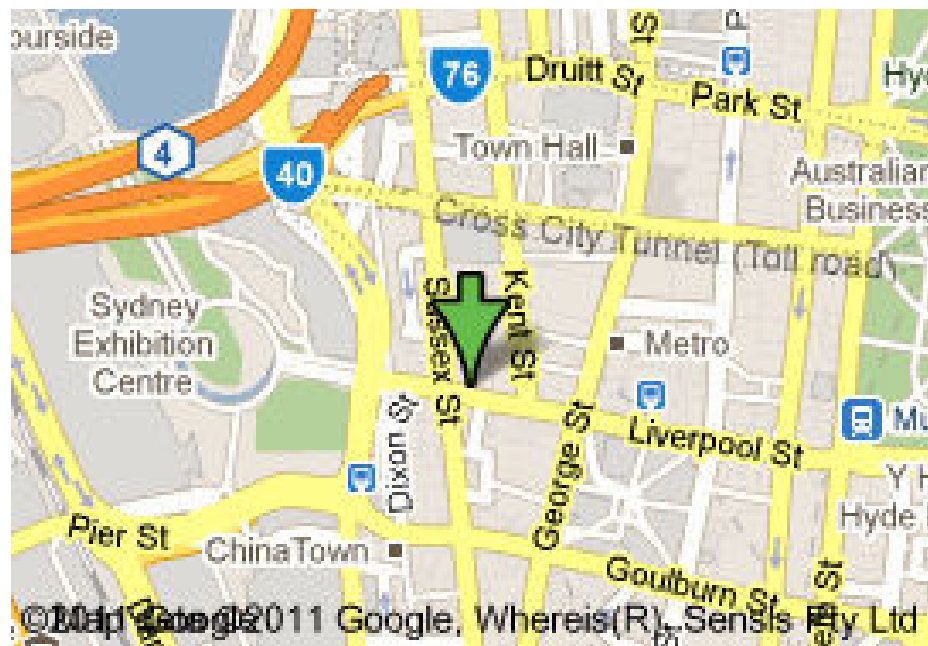
Credit Card Expire Date: .....

(\*This will be used if no show at the event)

## Map: Braza , 1-25 Harbour St, Darling Harbour



## Map: Car Parking



## **SSIT (Society for the Social Implications of Technology)**

### Upcoming NSW Activities

SSIT and the IEEE CE Australian Chapter agreed to jointly work on organizing a workshop in December at Sydney University on health technologies - co-organised by SSIT, CE and IEEE EMBS (Engineering Medical Biology Society).

Likely speakers will come from the UNSW Centre for Ubiquitous Computing and the UNSW SPCM and Centre for Big Data in Health. Together with speakers from the UNSW School of Optometry and the Sydney University IT Faculty - around wearable devices in health. At the end of the workshop we are proposing a set on projects that could emerge out of it.

Call for Papers for “Thinking Machines in the Physical World”: IEEE 2016 Conference on Norbert Wiener in the 21<sup>st</sup> Century (13-15 July 2016 in Melbourne)

Please go to <http://21stcenturywiener.org/> to find out more about this exciting conference next year.

John Lewis

NSW Coordinator



# Thinking Machines in the Physical World

2016 IEEE Conference on Norbert Wiener in the 21st Century

## Key dates

- 1 Dec 2015: Deadline for special session proposals
- 14 Feb 2016: Deadline for full papers for peer review (6 pages, IEEE format), Abstract only (2 pages), confirmation of acceptance 14 March.
- 30 Apr 2016: Deadline for final camera-ready copy of full papers.

We invite you to participate in the 2nd IEEE Conference on Norbert Wiener in the 21st Century. The conference will focus on opportunities and threats presented by advances in cognitive computing, in the context of Wiener's technical work and his concerns regarding technology and society.

Norbert Wiener was a mathematician, philosopher, scientist and engineer whose pioneering work in mathematics, computer science, systems control, biology and engineering led to cybernetics (the origin of "cyberspace" and "cyborgs"). This conference follows the successful inaugural conference in Boston, June 2014.

We invite paper submissions that consider Wiener's work from perspectives across applied, hard, and social sciences, as well as the humanities, fine arts, and professional/industry practice. Conference topics will include:

- Cognitive computing in theory and practice.
- Wiener's fields of work (cybernetics, information theory, philosophy, life sciences, interval computation, fuzzy sets, Brownian motion, analysis under uncertainty...).
- Wiener's societal concerns (information ethics, innovation and economic development, robots and work, cyber warfare and crime, science fiction as social commentary, cybernetics and literature, art and design...)

## Paper Submissions

All submissions will be online via the conference web site (below)

- Full papers (up to 6 pages, due 14 Feb 2016) will be peer reviewed. Accepted, presented papers will be provided for publication to IEEEExplore. Authors must prepare papers in the IEEE conference style (available on the website).
- Abstracts (up to 500 words) for research-in-progress and practitioner presentations will be assessed for relevance to the conference (not published in IEEEExplore), as will student posters (A2).
- If you require confirmation of acceptance earlier than the dates above, please contact us at [NorbertWiener-2016@unimelb.edu.au](mailto:NorbertWiener-2016@unimelb.edu.au)

## Student Papers:

Student research papers and posters are strongly encouraged.

## Special Sessions:

Proposals for creative/experimental session formats are welcome.

## Conference Chairs

General chair: Dr Greg Adamson, University of Melbourne  
Technical Program: Prof Iven Mareels, University of Melbourne  
Keynote Speakers: Prof Rob Evans, University of Melbourne  
Sponsorships: Prof Saeid Nahavandi, Deakin University  
Publications: Dr Valery Ugrinovskii, UNSW Canberra at ADFA  
Related events: Philip Hall, University of Melbourne  
Facilities: Kerry Ellen Beachen, University of Melbourne  
Finances: Jennifer Nguyen, Conference Treasurer



## Professor Graeme Clark, AC Laureate Professor Emeritus

"It gives me great pleasure to have the opportunity to welcome your interest in the work of Norbert Wiener and invite you to Melbourne to participate in this important conference." Professor Graeme Clark, AC Laureate Professor Emeritus, leader in pioneering cochlear implant research, the winner of numerous awards and honours and who continues to research the convergence between engineering and biology at the University of Melbourne.



## **Australian Engineering Week 2015(AEW 2015)**

This year Australian Engineering Week was held between 3 and 10 August 2015.

Sponsors included NSW Trade and Investment, UNSW, the Australian Government, Worley Parsons, Hyder, The IET and IEEE NSW Section.

The Harrick's Address was given on Monday 3 August 2015(6:30pm) at the Swissotel Sydney and the speaker was Brigadier General Wayne Budd, CSC, Australian Army. The address covered the contribution of returned servicemen to the development of Engineers Australia, the contribution of Engineers to the WWI effort and how engineering contributes to the Defence Forces.

Other major events and Site Tours included the Great Engineering Challenge at the UNSW, the Aurecon Bridge Building Completion at the Art Gallery of NSW, Opera House tour, Sydney Harbour Tunnel site tour, Barangaroo and numerous other site tours and events. The Engineering Forum covered the WestConnex and was held at the Museum of Sydney.

This year I volunteered to host the Opera House site tour. The tour guide Stephen and Engineering Manager Bob provided a comprehensive coverage of the history, construction, recently completed and ongoing renovations. The history from the competition for the design, selection of the winning proposal, design and construction problems with the sails, cost overruns and associated politics leading to the resignation of Jorn Utzen as Architect and opening by Queen Elizabeth in 1973 were all covered in detail. Innovations such as chilled ceiling cooling, chiller capacity and design as well as power supply arrangements, plant rooms, lighting systems updates, stage designs and problems posed to renovations by changing regulations were very well presented. The guides also talked about the current and planned stage and other productions.



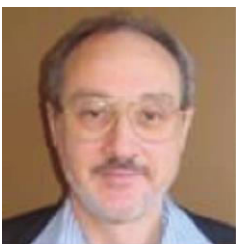


The tour started at stage door and included the Drama Theatre, Joan Sutherland Theatre, Concert Hall, the main Plantroom as well as some service areas.

For Sydney Opera House Events and Tours see [Opera House Tours](#)

Many thanks to all the Sponsors, AEW Committee and Volunteers as well as all the Organisations and Staff facilitating the Site Tours and Events.

Tony Zaglas  
AEW Committee Member





## Big Data Summit 2015

The Fourth Big Data Summit 2015 was held on 9 and 10 August 2015 at the Sydney Hilton and was co-located with KDD 2015. The IEEE NSW Section was a sponsor of the Summit and NSW IEEE Members were invited to attend free of charge.

The Summit's aim was to promote big data and data science innovation, economy, service and training and to provide professionals and academics with a perspective on regional and global Big Data research, education and practices and set out lessons learnt in Industry, Government and Academia.

Prof Longbing Cao of the Advanced Analytics Institute UTS, welcomed delegates to the Summit. The first day included many excellent presentations on Big Data from leading government officials, experts and practitioners from the US, Australia and South Korea. Presenters included John Sheridan and Pia Waugh of the Australian Government, Warwick Graco from ATO, Sofus Macskássy of Facebook, Paul Toohey from HP, Rajesh Parekh from Groupon, Brenton Cooper from D2D CRC, David Willingham from Mathworks, Sang Kyun Cha from Seoul NU, Christopher White from Microsoft, Balaji Krishnapuran from IBM and Stefan Mozar from the IEEE NSW Section. The second day comprised mainly the Data Science Innovations in India, Big Data in China and Big Data in Asia Panels. The program as well as some of the presentations and more photos can be found at <http://2015.bigdatasummit.co/> (click the summary tab)



Prof Longbing Cao addressing the Summit

Stefan Mozar delivered a well received presentation on Data Analytics in Electronics Manufacturing on behalf of the IEEE NSW Section. The presentation aimed to show how data analytics can be used to make improvements in manufacturing, and the impact engineering has on the manufacturing process. Also covered were the use of Monte Carlo simulation and analysis as well as several other statistical methods and techniques.

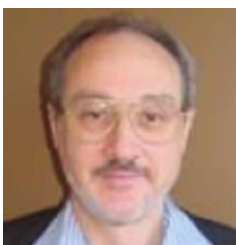
The Summit was very well attended with over 450 registrations and nearly 300 delegates and invited guests attending over the two days.



Stefan Mozar IEEE NSW Section delivering Data Analytics in Electronics Manufacturing Presentation

On behalf of the IEEE NSW Section I thank Prof Cao for the excellent organisation of the Summit and for exempting IEEE Members who attended from the conference fees. I would also like to thank all the sponsors, a full list of which can be found at <http://2015.bigdatasummit.co/> and the local arrangements organizers, International Institute of Data Analytics and UTS Advanced Analytics Institute.

Tony Zaglas



# UNSW School of Electrical Engineering and Telecommunications

## Industry and BBQ Night 2015

On Friday 7 August 2015 the UNSW School of Electrical Engineering and Telecommunications held it's second Industry Night.

ELSOC Industry Night gave students the opportunity to meet and discuss employment opportunities with representatives of participating organisations as well as obtaining information about the Engineering Profession.

The event, held in Leighton Hall of the John Niland Scientia Building, was very successful with 13 sponsoring Organisations and over 250 students attending.

Participating organisations included LX Group, Activ Energy, Dolby, Ericsson, COzero, Cundall, OSIsoft, Northrop, Cisco, Defence Force Recruiting, Emona and IEEE NSW Section.

Prof Julian Epps officially opened the event welcoming company representatives and students. Speakers included Dr Tim Moors and Ryahn Rahme.



I was joined at the IEEE NSW Section desk by IEEE UNSW Student Branch Secretary Azade Fotouhi and Treasurer Marzieh Jalal Abadi. At the end of the function, there was a BBQ on the Globe Lawn to which Alumni were also invited and students had the opportunity to socialise and discuss careers with graduates already in employment.

On behalf of the IEEE NSW Section, I would like to thank all the participating organisations, Prof Epps and the organising Committee for a very successful event and for inviting IEEE to participate.

Tony Zaglas

IEEE UNSW Student Branch  
Secretary  
Azade Fotouhi(left),  
and Treasurer  
Marzieh Jalal  
Abadi(right)  
and Tony Zaglas(centre)



## Macquarie University Student Branch/MTT-S Student Chapter Update

From May to September, a number of technical and non-technical events has been organized by IEEE Macquarie University Student Branch (IEEE MQU SB). On 5<sup>th</sup> of May, IEEE MQU SB along with Nepalese student association collected funds for Nepal earthquake, which were later sent to the World Food Programme (WFP). On 15<sup>th</sup> of May, a one day workshop on Antenna and Microwave Circuits has been arranged by MTT student chapter and MQU SB. Speakers from academia and industry were invited to give a lecture and share their experiences. Prof. Animesh Biswas (IIT-Kanpur, India) gave a lecture on “Microwave Circuits and Antennas”. Tony Fattorini (M/A-COM Technology Solutions) covered “Load-pull Measurement of AM-AM and AM-PM Characteristics for Microwave Power Amplifier Design”. “Reconfigurable antenna designs” was covered by Dr. Peiyuan Qin (UTS, Sydney). On 26<sup>th</sup> of May, IEEE Student Branch chair Rowan University (Glassboro, New Jersey) along with 9 members visited Macquarie University for informal discussion and future collaboration in areas of mutual interest.

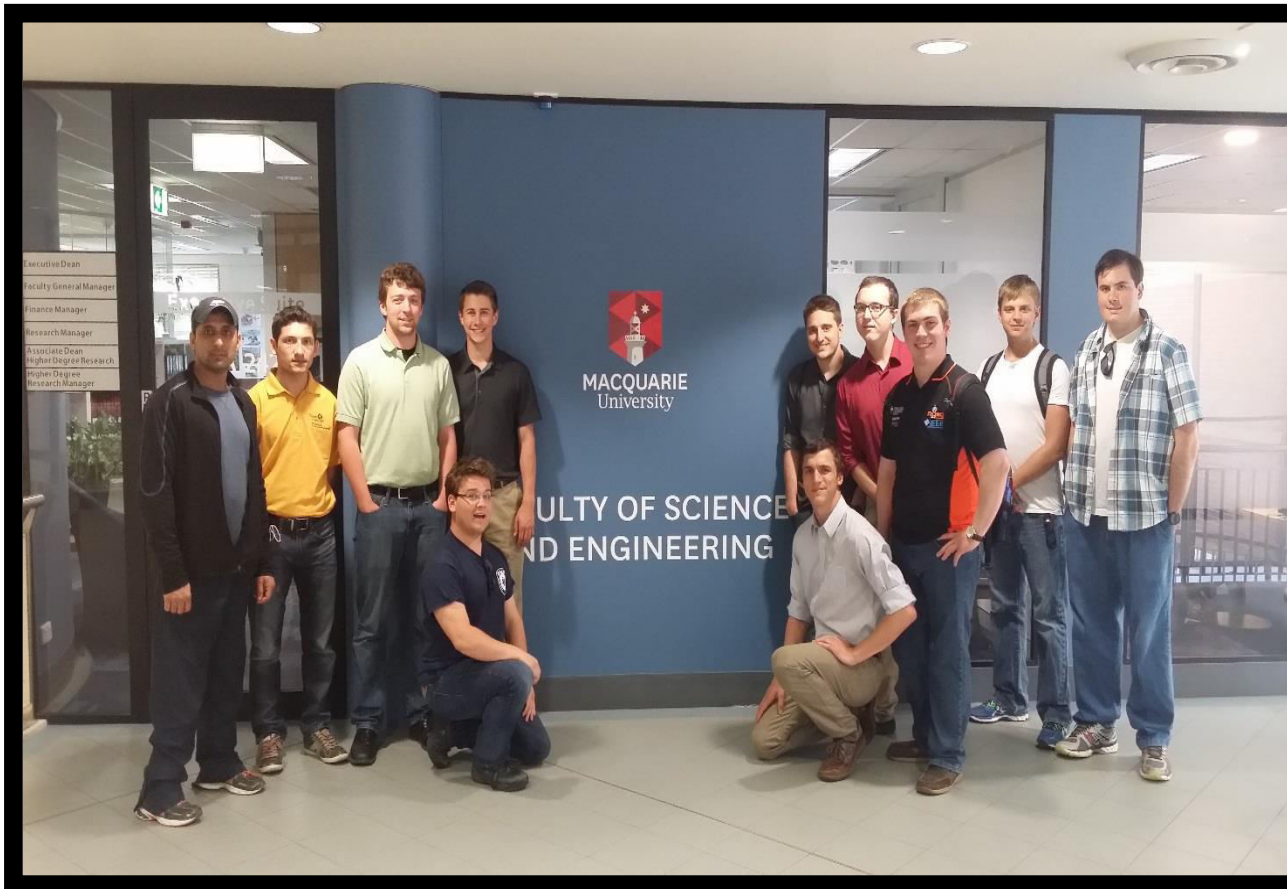
On June 9, first IEEE NSW wide casual teacher forum was arranged by NSW IEEE Education Society in collaboration with MQU SB at Macquarie University. The event was free, and highlighted the importance of casual teachers in engineering education. In addition, the importance of women in engineering education was also discussed. From 10-14<sup>th</sup> of July, members of IEEE MQU SB provided voluntary support to Robotic competition “FIRST LEGO League” in Judging (Asia Pacific Open Championship), which was held at Macquarie University.

On August 4, MQU SB arranged an invited lecture on Microwave Engineering: “What is it, where is it headed, and how it serves the mankind”, delivered by IEEE Distinguished Lecturer, Professor Madhu S. Gupta, San Diego State University, University of California, San Diego. The lecture was focused on what is RF and Microwave Engineering, what are the Frontiers of the Field, how does it contribute to Quality of Life. Another invited lecture as on 11<sup>th</sup> of August on Microwave Engineering: “UWB Antennas for Wireless Communication and Detection Applications” delivered by IEEE APS Distinguished Lecturer, Professor Ahmaed Kishk, Concordia University, Quebec, Canada. The lecture was focused on recent development of antenna designs in ultra-wide band (UWB) wireless communication.

As a part of its social networking activities, IEEE MQU SB also arranged a badminton tournament. More than 10 branch members participated in this event and have showed their sports skills. During September, MQU SB members also provided voluntary support to Department of Engineering during Open day held on 12th September 2015.

Tariq M. Khan  
Chair IEEE Student Branch  
Macquarie University





## POWER & ENERGY SOCIETY CHAPTER UPDATE

### ***Australasian Universities Power Engineering Conference (AUPEC) 2015***

AUPEC 2015 was held at the Novotel Wollongong Northbeach Hotel from 27-30 September 2015. It was hosted by the Australian Power Quality and Reliability Centre (APQRC) of the University of Wollongong and technically co-sponsored by the IEEE PES NSW Chapter and the NSW IES/IAS/PELS Joint Chapter. The event attracted 124 papers from 21 countries organised into 24 sessions. There were two tutorials presented on the Sunday, on "Renewable Energy - Grid Connection and PQ Issues for Commercial Buildings" and "Power Quality Data Analytics: Extraction and Utilization of Information from Power Disturbance Data".



Prof. Wilsun Xu of the University of Alberta and Editor-in-Chief of *IEEE Trans. on Power Delivery* giving a keynote address at AUPEC 2015

### ***Presentation by IEEE PES Distinguished Lecture Prof George Gross***

The IEEE PES NSW Chapter hosted a presentation by Prof. George Gross of the University of Illinois at Urbana-Champaign on 1 October 2015. Held at the University of NSW, the presentation was on "A Practical Framework for the Implementation of the Vehicle-to-Grid (V2G) Concept" and covered the role that electric vehicles might play in the future in supporting the electricity network. International travel costs for Prof Gross were funded by the IEEE PES Distinguished Lecturer Program.



### ***NSW Chapter AGM***

The annual general meeting of the IEEE PES NSW Chapter will be held at 6:00pm on Friday 20 November 2015 at the Sydney Hilton Hotel. This will be followed by the NSW Section AGM and the annual dinner. All PES members are very welcome to attend.

### ***Scholarship Win - Georgios Konstantinou***



Georgios Konstantinou, Secretary / Treasurer of the PES NSW Chapter and a Senior Research Associate with the Australian Energy Research Institute at the University of NSW, has been successful in receiving the Australia China Young Scientist Exchange Program, awarded by the Australian Academy of Technological Sciences and Engineering. This involves a two-week exchange of 16 Australian and 16 Chinese researchers from the fields of Science and Engineering.

Georgios will visit major State Grid research institutes and universities in China in November in order to showcase Australian Energy Research Institute research in the area of power electronics for transmission and distribution networks, as well as renewable energy and also the capabilities of our research laboratories including RTDS systems, to enable further research interaction and international collaborations.

### ***ISGT Asia 2015 - Bangkok***

The IEEE Innovative Smart Grid Technologies Asia Conference (ISGT Asia 2015) will be hosted by the Thailand PES Chapter in Bangkok from 4-6 November 2015, with tutorials on 3 November.

### ***APPEEC 2015 - Brisbane***

The Seventh Annual IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC 2015) will be hosted by the PES Queensland Chapter and will be held in Brisbane on 15-18 November 2015. The 2013 and 2014 conferences were both held in Hong Kong.

### ***POWERCON 2016 - Wollongong***

The University of Wollongong will host the IEEE PES International Conference on Power Systems Technology (POWERCON) from 28 September to 1 October 2016. This conference is held every two years in the Asia-Pacific Region, alternating between locations inside and outside of China. The 2014 conference was held in Chengdu, China, with the 2012 event being held in Auckland, New Zealand.

### ***SmartGridComm 2016 - Sydney***

The Seventh IEEE International Conference on Smart Grid Communications 2016 will be held in Sydney. The IEEE Communications Society is the technical and financial sponsor of the conference. The conference is expected to attract 300 engineers and academics over three days. The University of Sydney had a key role in preparing the bid to host the conference.

### ***The Power and Energy Technology Systems Open Access Journal***

This new open access journal is intended to be a technical journal containing practice-oriented articles focusing on all power and energy topics. Three issues are now available at IEEE Xplore.

### ***Senior Membership***

IEEE Senior Membership is open to members who have been in professional practice for at least 10 years, with at least 5 years of significant performance. There is no requirement to have been involved in academic research or to have published papers or the like. There is no cost or any additional on-going fees.

Application for Senior Membership is via an on-line process and there is a requirement for three references from IEEE Senior Members. This can be a problem for some potential applicants. If this is the case, please contact the PES NSW Chapter at [nsw.pes@ieee.org](mailto:nsw.pes@ieee.org), preferably attaching a copy of your resume. We can arrange for references from PES Senior Members and also for nomination by the IEEE NSW Section.

All eligible members are encouraged to apply.



Ray Brown is the Chair of the NSW Chapter of the Power and Energy Supply Section. His e-mail address is [ray\\_brown@ieee.org](mailto:ray_brown@ieee.org)



The Internet of Things (IoT) brings promising opportunities and challenges. It attracts great attention, and will have important economic and social impact. IoT will play a key role in the next generation of information, network, and communication developments. Future IoT may bring us an era of “harmony of man with nature”, which means a harmonious fusion of Physical-space, Cyber-space, and Social-space. We will witness an emancipation not only from onerous physical labor, replaced by machine-human interface, but also from the spatial-temporal constraints of Physical-space, and will achieve substantial benefits from IT development.

The 2015 IEEE International Conference on Internet of Things (iThings2015) will provide a high-profile, leading-edge forum for researchers, engineers, and practitioners to present state-of-art advances and innovations in theoretical foundations, systems, infrastructure, tools, testbeds, and applications for the Internet of Things, as well as to identify emerging research topics and to define the future. The iThings2015 is the 8th edition of the successful series, previously held as iThings 2014 (Taipei), iThings 2013 (Beijing, China), iThings 2012 (Besançon, France), iThings 2011 (Dalian, China), IOTS 2010 (Hangzhou, China), MINES 2009 (Hangzhou, China), and MINES 2008 (Chengdu, China).

The conference web-site is at <http://www.swinflow.org/confs/ithings2015/index.htm>

## **New Electromagnetic Compatibility Chapter in NSW**

John Aitken (the former editor of Circuit) is the new chair of the NSW IEEE's newest chapter,

CH09012 - NSW Section, ECM27

The Electromagnetic Compatibility (EMC) Society members within NSW Section were enthusiastic about forming the new chapter and the submission to the EMC Society was processed very quickly. We will be maintaining the momentum with a number of meetings during 2016, including plans for visits by Distinguished Lecturers on some topical subjects.

The first meeting of the chapter will be held prior to the NSW Section AGM, where we will elect a committee and plan our activities for 2016. All EMC Society members are very welcome at this meeting. If you are not an EMC Society member at the moment, perhaps now is the time to consider joining!

For more details please contact John Aitken at [john@jja.com.au](mailto:john@jja.com.au).

There's an IEEE Global Electromagnetic Compatibility Conference on in Adelaide from the 10<sup>th</sup> to the 12<sup>th</sup> November 2015 – see <http://www.gemcon.emcss.org/>. Colin Elston knows about it and wanted me to push it here.

## Ocean Engineering Joint Lecture

### Extracting Renewable Energy from the oceans? What will it take for the sector to live up to it's potential?

A large audience of over 100 gathered on 9 July 2015 for a presentation to the Joint Electrical Institutions Sydney – Engineers Australia, IEEE and IET. The audience heard from two leading Ocean Renewables companies with operations based in Sydney. Deputy Chair of the IEEE Ocean Engineering Committee NSW Section, Dr. Gunilla Burrowes, welcomed the attendees and set the theme as “Extracting Renewable Energy from the oceans? What will it take for the sector to live up to it's potential?”

Douglas Hunt, Managing Director of Elemental Energy Technologies (EET) was the first presenter. Doug gave an overview of the rapid-development process that is currently being implemented at EET for development of their MAKO turbines for generating power from ocean currents, tides and river flows. This process included advanced tools such as 3D modelling using Rhinoceros, optimisation using Grasshopper and test assembly of components using a Stratsys 3D printer. EET is currently setting to work a Kuka robot to complete the development cycle with rapid manufacture of full-size parts for test. Doug said that the rapid-development process at EET would be key to breakthroughs in technology for ocean renewables development and that the smart engineering team working on the project was testament to the ability of engineers in Australia and what could be achieved with innovative development processes.

Dr. Tim Finnigan, CEO of BioPower Systems then presented on the BioWave device now being constructed for deployment at a wave energy site near Port Fairy, Victoria in late 2015. Tim described the evolution of the BioWave device, early testing and development into a full-size 250kW generator. Working with partners, BioPower has developed the technology to convert the oscillating motion of the BioWave to electric power that will be grid-connected at Port Fairy. Tim noted that many ocean renewables designs had aimed for simplicity in subsea design, but in the BioWave design the subsea components would be highly sophisticated, capable of measuring currents using an ADCP and avoiding storm events by sinking to the ocean floor.

The session was ended with a lively question and answer period and many attendees remained after the talks for further discussions with Doug and Tim. Gunilla thanked both the presenters for their preparation and for making the evening a highly successful meeting.



Mr Doug Hunt, Dr Tim Finnigan and Dr Gunilla Burrowes during question time

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# Nominations for the 2016 executive committee of the NSW IEEE

## SECTION CHAIR

### 1. Karu Esselle



Professor Karu Esselle, PhD Ottawa, MASc, BSc Hons, Professor, Macquarie University; Past Associate Dean – Higher Degree Research, Division of Information and Communication Sciences; Past member of Dean's Advisory Council, Division Executive, and Department Head; In 2014, was elected to the IEEE Antennas and Propagation Society Administrative Committee for three years - only person in Asia-Pacific Region to be elected to this competitive position since 2009; Served IEEE NSW for 18 years; NSW Section Vice-Chair 2014 and 2015; Awarded 2011 Outstanding Branch Counsellor Award from IEEE headquarters; Awards to IEEE Student Branch he formed includes 2013 1st Prize for Outstanding IEEE Student Branch in Australia and 2011 2nd Prize for the Exemplary Student Branch in IEEE Region 10.

Other contributions:

Chair, Board of Management, Australian Antenna Measurement Facility

Co-Chair, Technical Program Committees: APMC2011, TENCON2013, ISAP2015

Publicity Chair, ICEAA2016, IWAT2014, APMC2000

Guest Editor, IEEE Access Special Section

Guest Editor, International Journal of Antennas and Propagation

Associate Editor, IET Microwaves, Antennas and Propagation

Director, Centre for Collaboration in Electromagnetic and Antenna Engineering

Program Leader, Wireless Implant Platforms, WiMed Research Centre

Past Chair, current Vice-Chair, IEEE NSW AP/MTT Chapter

Past Chair, IEEE NSW Section Educational Activities

Member, IEEE MTT Society Technical Committee 10

Counsellor and Founder, IEEE Student Branch @ Macquarie

Adviser, IEEE MTT Student Branch Chapter @Macquarie

Founder, Australia-New Zealand Initiative to promote IEEE

Expert assistance to more than a dozen Australian and overseas companies.

More information: <http://web.science.mq.edu.au/~esselle/>

## 2. **Stefan Mozar, FIEEE**



My engineering degrees are from UNSW, and my MBA from UTS. I work as an independent consultant, and as Adjunct Professor (Guangdong University of Technology, China). I have taught at a number of Asian, Australian and British Universities. My work has resulted in inventions, patents, publications, and book chapters.

### ***Chapters & Section committees:***

Singapore, Hong Kong, NSW-Australia. I have served as: Chapter Chair and founder of CE Society chapter Singapore, Chapter Chair CES Hong Kong, Deputy Chair, & Treasurer Engineering Management Singapore.

In NSW I served on Communications and Computer Societies, and am the EMBS Chair. I prepared the winning bid to bring Tencon-Spring conference to Sydney, and I prepared the bid for the Metropolitan Area Workshop (MAW).

### ***Societies:***

CES President (2013-2014). CES VP for International affairs, and VP Conferences. Currently VP Conferences for the Product Safety Engineering Society, and an elected board member of Broadcast Technology Society.

### ***Technical Activities Board (TAB):***

I served as an elected member of the conferences committee. I chaired ad-hoc committees on conference naming, and finance. I served on the Panel of Conference Organizers (POCO), and on the 2013 Technical Activities ad-hoc committee on Global Perspectives.

### ***Major Achievements:***

- I started 11 conferences. One of them has been held for 19 years, and is booked until 2020.
- I initiated the CES's Consumer Electronics Magazine.
- I introduced video clips to promote CES activities ([YouTube.com/ieeeCESocTV](https://www.youtube.com/ieeeCESocTV))

### ***Awards:***

IEEE: 12; Industry: 28; Best Paper: 2

### ***Goal:***

I will serve members and support them in their various career stages (Student, Young Professional, Women, Members, and Life Members) in order to make the IEEE relevant to them.



## SECTION VICE CHAIR

**Ray Brown**



Ray Brown has been a member of the IEEE for 24 years and is presently a Senior Member and Chair of the NSW Chapter of the IEEE Power & Energy Society. He is active in the IEEE NSW Section, regularly providing articles for Circuit and facilitating member advancement to Senior Member grade.

He was treasurer for the successful IEEE ICPADM 2015 conference held in Sydney in July and Technical Program Chair for IEEE technically co-sponsor CIDER 2015 conference held in Brisbane in August. He attended IEEE POCO (Panel of Conference Organisers) in Singapore in 2014 and the PES Region 10 Chapter Chairs meetings in Bangalore in 2013 and

Kuala Lumpur in 2014 and will attend the 2015 meeting in Bangkok in November. He runs his own consultancy in power engineering and has a BE and BSc from the University of NSW.

## SECTION SECRETARY

**Dushmantha Thalakotuna**



Dr. Dushmantha Thalakotuna obtained his PhD (2012) in electronic engineering from Macquarie University and BSc in Electronic and Telecommunication (2008) from University of Moratuwa, Sri Lanka. He has over 6 years of experience in telecommunication industry and currently a Radio Frequency Engineer at Commscope Australia.

Dushmantha Thalakotuna is an IEEE member. He is also an Antenna and Propagation (AP) and Microwave Theory and Techniques (MTT) society member. Dushmantha has served the IEEE community in various position in IEEE committees. He held Chair (2011-2012) and Vice chair (2010-2011) positions at IEEE Macquarie University student branch. During his time as Chair, the Macquarie student branch was awarded the second best exemplary student branch prize. Dushmantha has also been with

IEEE NSW section committee for over two years and currently the secretary of IEEE NSW section.

## SECTION TREASURER

**John Ypsilantis**



John Ypsilantis (M'1985, SM'2014) received his BSc degree (1984) in Pure Mathematics and Computer Science, his BE (Electrical) (1986) degree with First Class Honours and his PhD degree (1993) all from the University of Sydney, Sydney, Australia. He is Managing Director and Principal Consultant at Heuristics Australia Pty Ltd, an electrical engineering and ICT consultancy based in Sydney, Australia, which provides design and consultancy services to large public and private utilities in Australia and overseas. Dr Ypsilantis has served as Secretary/Treasurer for the NSW chapter of the IEEE Power Engineering Society (2012), Secretary for the NSW Section of the IEEE in Australia (2013 and 2014) and currently serves as Treasurer for the NSW Section of the IEEE. Dr Ypsilantis' specialisations include automatic control and

communications systems and SCADA for gas, water and electricity utilities, data communications and network security for utilities and the application of machine learning and intelligent systems to utility operations.

**Voting is easy, so vote now!**

**Voting closes on 14 November.**

<https://voting.vtools.ieee.org/>

Voting is through the IEEE vTools system, which makes it easy for you to vote.

The candidate statements here are also on vTools so you can refresh your memory when you vote. Please contact me if you have any questions, comments or complaints about your voting experience.

**NOTE: Members that have elected to receive a paper copy of CIRCUIT will also receive a paper ballot that may be completed and returned to the Nominations Chair.**

**PLEASE DO NOT USE THE PRINTED BALLOT FORM IF YOU VOTE ELECTRONICALLY**

Bruce Poon, [Bruce.Poon@IEEE.org](mailto:Bruce.Poon@IEEE.org)

Membership Development Chair,

IEEE NSW Section



## Life Members Affinity Group

NSW section has over 100 Life Members. To qualify as a Life Member, one must be over 65 and the sum of one's age and years of membership must exceed 100.

Currently, a survey of members is being undertaken to determine how the group can be relevant to its members. The Group has a wide range of membership from those that are in the workforce, to those that aren't but are looking for challenges, to those who are no longer actively involved in engineering. It is believed that an important function of the group is to provide support to its members, especially in time of need. To provide this support, it is important that members get to know each other. This may be through having worked in the same company or industry, or in a related discipline or just through living in the same area.

What can Life Members contribute to the Institute? We could – for instance – document a bit of the history of electronics in Australia.

There is a wealth of history and knowledge of projects and events that have happened but if there is any documentation of them, nobody much seems to know much about it. Australians have been at the leading edge of many activities – are people aware of them?

These are some thoughts about the Life Members Affinity Group. If you have any others to offer, or would just like to discuss this one or generally get involved, please contact Colin Elston ([talbingo@optusnet.com.au](mailto:talbingo@optusnet.com.au))

## The Joint Institutions Lecture Program for 2015 as at 30<sup>th</sup> September 2015

Date	Lecturer	Title
October 22, 2015	Prof. Andrew Dzurak, UNSW	Silicon Quantum Computing
November 12, 2015	to be advised	Inland Rail Project
November 26, 2015	Dr. Sweeting the 2015 Sargent MA	to be advised
December 10, 2015	Dr. Geoff James, ex-CSIRO consult.	Energy Storage

## Metropolitan Area Workshop (MAW)

The NSW section has been successful in winning support to host a MAW. It is sponsored by the IEEE Members Geographic Area (MGA), Region 10, and the NSW Section.

The MAW is a seminar that covers a variety of topics that are of current interest to members, and is specially targeted at practitioners. It takes a more applied form, rather than the presentation of a research results. We plan to host the MAW during the last week in November. It is planned to be of two days duration, and will be conducted with two parallel strands. Topics we are planning for include IoT, G5 Networks, Electrical Maintenance, and Big Data and other topics.

Planning has started, and further details will be provided as soon as the venue is decided. Keep an eye on the IEEE NSW Section Website! See you at the MAW!

For further details contact Stefan Mozar at: [s.mozar@ieee.org](mailto:s.mozar@ieee.org)

## New and Upgraded Members 1<sup>st</sup> March 2015 to 30<sup>th</sup> June 2015

### New and Upgraded Fellows

We have 30 in total in NSW and the total hasn't changed in the past few months

### New and Upgraded Life Fellows

There are ten in NSW and their total hasn't changed recently either.

### New and Upgraded Senior Members

We have 260 senior members in NSW

Bahman	Javadi	Rami	N	Khushaba
Tuan	Nghia	Nguyen	Sasha	Nikolic
Brett	J	Robert	Steven	J
				Scheding

This may not seem like all that many but when the R10 Membership Development Committee, was pleased to announce the winning Sections of the 2015 R10 MD incentive grants, we were in there

Section c. Senior Member Elevation

1. Delhi
2. **New South Wales**
3. Malaysia

It's also nice to see Sasha Nikolic's name in the list – he's been a frequent contributor to Circuit.

### New and Upgraded Life Senior Members

We have 18 life senior members in NSW, but no new ones to report..

### New and Upgraded Members

Dinuka	Abeywardena	Pablo	Fernando	Acuna
Viqar	Ahmad	Kazi		Ahsanullah

Obada	Atif	Al-Khatib	Ismail	Mohamed	Ali
Ahsan		Ali	Ahmed	M.O.	Alshabo
Le		An	Khairul		Anam
Georgios		Angelis	Asoka		Arampatta
Phil		Armstrong	Annie	Arockia	Baskaran
Mark	John	Atherton	Adel		Atieh
YeeMon		Aung	Hesham Wahid Mohamed Hamed	Badr	
Kamini	Simi	Bajaj	raj	nath	bhat
John	A	M	Brady	Stefanie	Brown
Xuan		Cao	Jay	R	Carniel
Yuan		Chang	Wei-Hua		Chen
Tao		Chen	Xuan		Cheng
Tsz	Lam	Chim	Amanda		Cottingham
Nicholas		Cummins	Emma		Cunningham
Aarohi		Dalal	Peter		Dalton
Rosheila		Darus	Can		Ding
Fikret	Taygun	Duva	Homa		Edalatifard
Arnfinn	Aas	Eielsen	Yuxiao		Feng
Adam		Finch	Jessica		Foyster
Michael	K	Frechtling	Min		Fu
Samanthi		Gardner	Daniel	James	George
Marcos	P.	Gerardo Castro	John	E	Gillam
Peter	Aloysius	Gillis	Gerrit		Gmel
Clinton		Goodwin	Luise	Amalia	Grice
Michael	Amor	Griffin	Julian		Grodzicky
Martin		Groen	Hassan	Habibi	Gharakheili
Aluysius	Maria	Ardi	Handojoseno		Hasheminamin
Zhibin		Hong	Sujuan		Hou
Ecaterina	Marion	Howard	Mengyu		Huang
Alessandro	David	Jaku	Robert		Jandausch
Muhammad	Affan	Javed	Hiranya	Samanga	Jayakody

David	Graham	Johnson
Minsu		Jung
Przemyslaw	Leonard	Kaminski
Debabrata	Kumar	Karmokar
Joel	Thomas	Kennedy
Jung-Ha		Kim
Henry		Lau
Kai	Chin	Lim
Gabriel		Lopata
Richard	Maxwell	Lucas
Dillon		MacEwan
Ramya Ratan	Lazwanthi	Mallavarapu
Gregory		Mar
Mohammad		Maroufi
James		McCoull
Sally		McKinnon
Jose	Alejandro	Monroy
Rachael	Ann	Morgan
Pawan		Narayan
Kevin	Thach	Ngo
Trung	Vu	Nguyen
Dipak	J	Patel
Rohit	Balasaheb	Patil
Jonathan	David	Point
Sivarajah		Prasanth
Md.	Tanvir	Rahman
Dothinka	Saranath	Ranamuka Rallage
Andrew		Reynolds
Rhiannon		Ryder
Steve		Sam
Antonio	P.	Santos

Chase		Johnson
Anup		Kale
Rizhong		Kang
Maninderjit		Kaur
Bikram		Khadka
Taekyun		Kim
Jon		Lee
Steven		Limpert
Graeme	W	Lowe
Yuanye		Ma
Siddhartha		Majumdar
Josh		Manderson
Nathan		Marks
Ayman	Mahmoud	Matkari
Martin		McGrane
Santanu		Metia
Tim	Gerard	Moore
Ghulam		Murtaza
Bahareh		Nazari
Huy	Hoang	Nguyen
Shirui		Pan
Harshal	M	Patel
Mark	Anthony	Pike
Mohammadreza		Pourakbar
Shameer		Qureshi
Mohamad		Rajab
Elizabeth	Louise	Ratnam
Serge		Rozentsvet
Md.	Shirajul Islam	Sagar
Clive		Sam
Suhrid	Raj	Satyul



Peter		Scholz	Chris		Shaw
Jibran	Adeel	Siddiqui	Bibek		Singh
Geoff	D	Skinner	Travis	N	Stenborg
Daobilige		Su	Javad		Taghia
Jo	Lyn	Teh	Ermias	Zerazion	Teweldemedhin
Danan		Thilakanathan			
Badari	Narayana	Nagarajasharman	Hongda		Tian
Thyamagondlu					
Baoying		Tong	Khoa	Tan	Tran
Bao	Cao Quang	Truong	Abu	R	Ullah
Vivek		Unnikrishnan	Suryanarayana		Uppala
Cristian	Rafael	Vallejo	Aloysius Johannes	Wilhelmus van Kempen	
Benoy		Varghese	Anastasios		Viglas
He		Wang	Haiming		Wang
Yan		Wang	Xueyuan		Wang
Yiying		Wei	Henry		Welch
Alison		Wenham	Amila	Suranga	Wickramasinghe
Mahanama	Sooriyabandara	Wickramasinghe	Daniel		Wilson
Stewart		Wilson	Thein	Moe	Win
Rui		Xu	Han		Xu
Weijia		Yan	Shanglin		Ye
Geoffrey	Dae Geun	Yoon	Sean	Isaac	Young
Yifan		Yu	Dimitri		Zantidis
Marc	Patrick Hans	Zapf	Jiawei		Zhang
Guopeng		Zhang	Boyan		Zhang
Chiya		Zhang	Rongkun		Zheng

## New And Upgraded Life Members

We have no new Life members to report here

## New And Upgraded Graduate Student Members

Yasmin	Nigar	Abdul	Rasheed	Kazi	Swad	Abdullah
Iwan			Adhicandra	Daniel		Alalam
Yohanes	Dwi		Anggoro	Tanvir		Anwar
Ravi			Arora	Sujata		Basnet
Donna			Brandon	Qianqian		Chen
Tian			Cheng	Amit		Chopra
Nipa			Chowdhury	Thai	Son	Chu
Zhongli			Dong	Zahra		Esmati
Hua			Fan	Joel		Ferguson
Jake	Rolle		Figueroa	Stuart	Patrick	George
Navid			Haghdadi	Sumaiya		Hasan
Saad	UI		Hasan	Roshanak		Heidari
Rahmat			Heidari	Tam		Ho
Zoe			Hungerford	Saad		Irtza
Mosarrat			Jahan	Chitra		Javali
Fangzhou			Jiang	Sagar		Jinachandran
Marcel			Julliard	Kalyani		Kaja
Uday	Kiran	Shetty	Kaukuntla	Arslan		Kiyani
Sinh	Cong		Lam	Khanh		Le
Tung	Vinh		Le	Jingjing		Li
Sidong			Liu	Ming		Liu
Cheng			Luo	Revika		Maharjan
Khizir			Mahmud	Blair		Morrison
Sayidul			Morsalin	Linh		Pham
Mostafa	Rahimian		Omam	Md.	Masud	Rana
Girish	Shivalingappa		Revadigar	C. M. F. S.		Reza
Michael			de Ridder	Stephen		Rose
Ayu			Saraswati	Elham		ShabaniVaraki

Jingyu	Shao	Zhan	Shi
Xiaolong	Shi	Arash	Soroush
Bharat	Subedi	Haihan	Sun
Xiaolin	Tang	Anastasiia	Volkova
Xue	Wei	Handy	Wicaksono
Talpe	Wijesinghe	Dongyao	Wu
Zhe	Xu	Ying	Xu
Junyu	Xuan	Chi	Yang
Jiajia	Yang	Eisa	Zarepour
Yuchen	Zhang	Cuo	Zhang

We have 401 Graduate Student Members in NSW.

## New Student Members

Abdollah	Ahmadi	Affan	Aziz	Baba
Chirag	Pranavkumar	Bhatt	Mahesh	Bhattarai
Reid	Dwyer	Alex		Fogarty
Havya	Geethika	Gade	Zhongyan	Ge
Sanish	Gopali	Kaivin	Kai	Xi
Darshana	Nayanajith	Jayasinghe	Fan	Jin
Wai	Lau	Bomiao		Liang
Henry	Liu	John	Charles	Maroney
Daanisha	Mistry	Dhwani		Patel
Anton	Pogrebnyi	Ritesh		Sthapit
Sonja	Stuedli	Frans		Sunarto
Yizhen	Xu			

We have 102 Student Members in NSW

## New and Upgraded Associate Members

Chengcheng	Liu
Michael	Weaver
James	Wright

There are 22 Associate Members of the NSW IEEE

## New and Upgraded Affiliate Members

Francis		Cooray
Mao	Lin	Huang
Young	Choon	Lee
Chang	K	Sung
Louis	J	Taborda
Luyao		Wang
Bingxuan		Xie

Bruce Poon – e-mail [adsphere@optusnet.com.au](mailto:adsphere@optusnet.com.au) – extracted this data from the IEEE's SAMIEEE database, which isn't easy. Converting what comes out into alphabetically ordered lists of names grouped by grades is now a lot easier than it was, thanks to Bruce.



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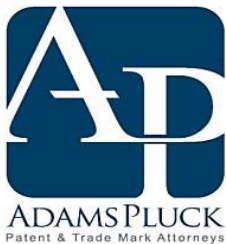
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