

MEETING DATE: 20 November 2019

**LOCATION**: Rydges Sydney Central, 28 Albion Street Surry Hills

START TIME: 6:45 PM
CHAIR: Sasha Nikolic

#### **Agenda**

1	Welcome
2	Attendance and Apologies
3	Minutes of 2018 Annual General Meeting, 21 November 2018. That the minutes of the 2018 AGM be accepted.
4	Matters arising from the minutes of the 2018 AGM
5	Chair's Report 2019 – Sasha Nikolic
6	Treasurer's Report 2019 – Bill Sloman
7	<ul> <li>Awards</li> <li>NSW Section Outstanding Volunteer Awards</li> <li>R10 Outstanding Volunteer Award</li> <li>R10 Postgraduate Research Paper Awards</li> <li>IEEE WIE Awards</li> <li>IEEEXtreme Award</li> </ul>
8	Incoming 2020 NSW Section Committee – Mahmoud Elkhodr  Voting of the Executive Committee  Introduction of new committee members  Words from the new Chair and vision for the future
9	Members' questions and comments
10	AGM Closure



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# Joint Chapter - Antennas and Propagation/ Microwave Theory & Techniques Chapter Report

The following activities were held in 2019:

- 1. Special Guest Seminar on Adaptive META Antennas for New Space Applications such as IoT, 5G, HTS, GNSS, held at UTS, November 2019
- 2. Antenna Design Poster Competition and Networking Session, held at University of Sydney, November 2019
- 3. DL (AP) on Reflectarray Antennas: Theory, Designs, and Applications, held at MQU, October 2019
- 4. Administrative Meeting of Chapter Officers, October 2019
- 5. Training Workshop on Altair FEKO Simulator: Application for High Frequency Simulation, held at Macquarie Park, September 2019
- 6. DL (AP) on Higher symmetries: A new degree of freedom for the design of periodic structures, held at MQU, June 2019
- 7. DL (AP) on Lens antennas: Fundamentals and present applications, held at UTS, June 2019
- 8. DL (AP) on Terminal Antenna Design for Future Wireless, held at MQU, June 2019
- 9. Guest Seminar: Advanced terahertz device and system based on resonant tunnelling diode and photonic crystal, held at UNSW, May 2019
- 10. Guest Seminar: Harmonising Engineering Education with Nature, held at UTS, March 2019
- 11. DL (MTT) on Automotive Radar: A Signal Processing Perspective on Current Technology and Future Systems, held at MQU, March 2019

Report submitted by Raheel Hashmi, Chapter Chair 2019.



# Joint Chapter - Power Electronics, Industrial Electronics and Industry Applications Chapter Report

#### Committee

The current Joint Chapter Committee was elected at the previous Annual General Meeting (21st November 2018) and the Committee Members are:

- Chairman: Associate Professor Dylan Lu (Dylan.Lu@uts.edu.au)
- Secretary: Mr Md Rabiul Islam

#### Main activities in 2019

- 7 February, 2019: Prof Ron Hui, Distinguished Lecturer (past) and IEEE Fellow, delivered a seminar on "Past, Present and Future of Wireless Charging for Portable Electronics" at The University of Sydney.
- 25 July, 2019: Prof. K. Gopakumar, Distinguished Lecturer (current) and IEEE Fellow, delivered a seminar on "Polygonal Voltage Space Vector Generation Using Switched Capacitive Filters for Drive Applications" at UTS.
- 25 July, 2019: A networking event was held at a local restaurant following the first technical meeting of the year.
- Mid-November 2019: A networking event is to be held following the end-year-meeting of the year.
- The chapter page on the IEEE NSW section website is under construction and expected to be appeared by the end of the year.



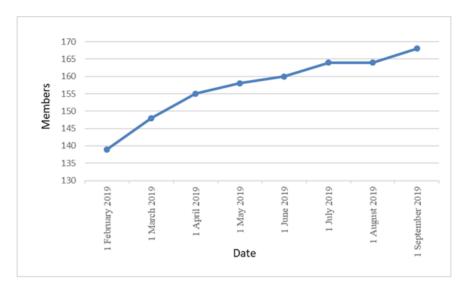
Prof Ron Hui shared the past, present and future of wireless power transfer technologies on 7 Feb 2019.



Prof K. Gopakumar discussed the converter topologies and control techniques for multilevel inverters for motor drive applications on 25 July 2019.



#### Membership status



#### **Budget**

The Joint Chapter is grateful for financial support of \$1,365 from the NSW Section.

#### **Future priorities**

- The Committee will continue to promote the joint chapter in alignment with key IEEE events worldwide such as IEEE PEL's day and IEEE week.
- The Committee's medium to long term goal is to host a major international or regional power or industrial electronics conference (e.g. SPEC, AUPEC, ISIE, ECCE-Asia, etc.) in Sydney. This will be a potential initiative for the future Committee.

#### Conclusion

The Joint Chapter has continued its momentum in regards to the technical meetings and some chapter activities. We look forward to more participation and benefits to members in coming years.



### **Instrumentation and Measurement Society Chapter Report**

#### Committee

- Chairman: Subhas Mukhopadhyay
- Secretary: Mohsen Asadnia

#### **Activities in 2019**

The following technical activities, 6 seminars and one workshop were organized in 2019 by the IEEE IMS NSW chapter.

Title	Date
Electrical capacitance tomography and industrial applications: New South Wales Section Chapter, IM09	16 May 2019 11:00 AM
Measurements on beams of particle accelerators: the CERN CLEAR facility: New South Wales Section Chapter, IM09	30 May 2019 11:00 AM
IEEE IMS NSW Chapter, Sydney 3rd Annual Workshop on Sensors, Instrumentation and Measurements: Theory and Applications : New South Wales Section Chapter, IM09	25 Jul 2019 09:30 AM
Josephson Arbitrary Waveform Synthesizer as a quantum standard of voltage and current harmonics : New South Wales Section Chapter, IM09	22 Aug 2019 04:00 PM
An Acute Respiratory Infection (ARI) Monitor to Detect Infant Pneumonia : New South Wales Section Chapter, IM09	27 Aug 2019 12:00 PM
Reinforcement learning-based thermal comfort control for vehicle cabins : New South Wales Section Chapter, IM09	02 Sep 2019 10:00 AM
The role of IoT in advancing Humanitarian Energy Infrastructure : New South Wales Section Chapter, IM09	04 Sep 2019 10:00 AM





Prof. Yang of Manchester University



Mr. Antonio Gilardi of CERN



Annual workshop 2019





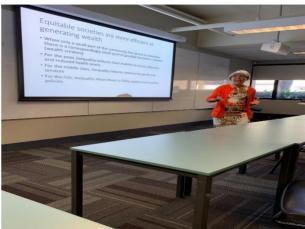
Dr. Dimitrios, NMI



Prof. M. B. Srinivas of BITS Pilani, India







Prof. James Brusey, Coventry, UK

Prof. Elena Gaura, Coventry, UK



### **Update on Education activities**

The major activity for 2019 was to give support and funding to the IEEE Milestone Award activity. This was considered to be of significant importance in the education of the general public, and some of the technical society, about a very significant contribution made by the CSIRO radio telescope at Parkes, NSW to the Moon Landing of 50 years ago.

### **Update on TISP/TSSP activities**

There was low participation in teacher conferences due to a number of factors. There were changes in the way many of these were conducted. The opportunity was taken to use the IEEE Milestone Award to provide technical exposure and education to the STEM students who were able to attend, and the funds available were applied to this project.

#### IEEE MILESTONE AWARD for the CSIRO "DISH" at Parkes, NSW

This most significant event in the IEEE international annual calendar was conducted successfully on Friday 11<sup>th</sup> October at the CSIRO radio telescope at Parkes, NSW. The IEEE President (elect) for 2020 was able to attend in company with the Region 10 Director. Over 25 visitors and IEEE supporters attended a Civic Reception provided by the Parkes Council on the late afternoon of Thursday 10<sup>th</sup> October, where presentations were made to the CSIRO and IEEE NSW Section.

On the following day, over 80 gathered at the radio telescope for the unveiling of the Milestone plaque. During the ceremony presentations were made by NASA to the CSIRO by way of an Apollo medallion. This was followed by lunch, and then the CSIRO staff provided conducted tours of the "Dish" to all who wished to participate.

The day concluded with a celebratory dinner at which due thanks were given to all those who contributed.

This event provided extensive publicity in both local press and tv, which proved most beneficial for the image of the IEEE in NSW. One of the organising committee who provided this information on his Facebook site recorded over 1500 hits.

Reported by Graeme Gwilliam



### **Computer Society NSW Chapter Report**

In April 2019 a talk on "Can We Win the War Against Online Hate? Was given by Dr Andre Oboler, CEO of the Online Hate Prevention Institute and a Senior Lecturer in the La Trobe Law School. The event was jointly sponsored with the IEE Society On the Social Implications of Technology. Abd was help at the University of NSW. This was a very successful event, and about a hundred people attended.

In May the NSW Chapter was visited by Dr. Yervant Zorian, the Vice President (Member and Geographic Activities) of the IEEE Computer Society. A very productive exchange of views and information took place between the local Chair and the visiting Vice-President.

Professor San Murugesan from the University of Western Sydney was inducted as IEEE CS Golden Core Member in appreciation of his service to the Computer Society. A presentation to Professor Murgesan took place at an award ceremony held at COMPSAC2019 in Milwaukee, USA on 17th July.

In September, we were pleased to receive an offer of volunteer assistance from Ms Naila Mukhtar, a PhD student from Macquarie University and we hope to welcome her to the 2020 committee.

Many thanks got to Bruce Poon for his assistance throughout the year and in the creation of this record of events.

lan Boyd Chair, Computer Chapter, 2019



# Joint Chapter - Broadcast Technology, Consumer Electronics and Product Safety Engineering Report

The Joint Chapter was formed in late 2016 at the request of some members.

It has not had a committee, there have been no volunteers. I have liaised with Australian section of SMPTE (Society of Motion Picture and Television Engineers) with invitations the each other activities.

I have organised lectures for the Joint Chapter through the JILS lecture series.

Due to my other commitments in 2020, I will be unable to continue nursing the Joint Chapter along. Are there any members willing the take over the Joint Chapter?

One activity that the Joint Chapter could be involved with is ABE2020 which is expected to be held in August.

Colin Elston Chair



### **Life Members Affinity Group Report**

The Group has had 2 activities this year:

- Visit to Parkes for the Milestone Event.
- Visit to UTS Data Arena and lunch.

In previous years, I had organised Sunday Lunches at various locations but due to low numbers, I did not organise any this year.

I will not be standing as Secretary for 2020.

I hope that some new members will rejuvenate the Group.

The Group has over 130 members of which over 80 are still 'members' only. I would like the Group to assist these 'members' become Senior Member, where appropriate.

The Group can only be active if the members become involved and suggest activities they would like.

Could I suggest that the Section, Life Members in particular, research some possible 'Milestone Events'.

Colin Elston Secretary



### Women In Engineering (WIE) Affinity Group Report

#### **Executive Committee 2019**

Meet our amazing committee members!

Chair: Hai Yan (Helen) Lu Vice-Chair: Naila Mukhtar Secretary: Meriam Bautista



IEEE NSW WIE has organized several quality workshops and events to support women in NSW section. Our aim is to organize events in collaboration with diverse groups from industry and academia which aids in visibility of IEEE WIE to broader community, and thus helps in extending the support to women working in diverse sectors of STEM. All workshops were attended by minimum of 50 attendees from both academia and industry.

#### **WIE Workshop on Professional Development**

To grow in career, specific set of soft skills are required in addition to the technical skills. By realizing the need, a workshop was organized on 9<sup>th</sup> August, 2019 during IEEE NSW flagship event UNITE 2019. Aim of the workshop is to help members in learning and nurturing the skills which are useful for professional growth. Invited speakers included Dr. Anne Gardner (Head of School, Professional Practice and Leadership UTS), Varsha Chowdhury (National Manager, Professionals Australia) and Shujuan Huang (A/Prof. School of Engineering, Macquarie University). Experts from diverse backgrounds shared tips on building personal brand using social media, highlighting skills in resume, finding a mentor, and being a reflective practitioner. The workshop was organized by IEEE NSW WIE affinity group in collaboration with all other WIE affinity groups in the section, which helped in reaching out to wider audience in other chapters and societies.

#### Women in Engineering and IT Symposium

Increasing the participation of women in STEM degrees and professions is high on the agenda for universities, industry and the government. The Federal Government's Women in STEM Decadal plan launched in April 2019, has acknowledged that there are a large number of initiatives addressing this challenge. Collaboration across the university sector, together with industry and schools, will broaden and deepen our impact on girls and women, and minimize duplication of effort. In line with this, the Women in Engineering and IT Symposium was organized which brought together universities across Australia who are working towards increasing the participation of women in STEM degrees, particularly engineering and IT. The purpose of this event was to address the diversity problem as a collective network, through collaborative initiatives and actions. IEEE NSW WIE is the proud supporter of the initiative, and also was part of organizing committee. It was a two-day event (3-4 Oct, 2019), with a number of keynote speeches and discussion sessions.

#### **Exhibit at UNITE**

UNITE is IEEE NSW flagship networking event which provides a platform to IEEE NSW members to network and share ideas. This year IEEE NSW WIE affinity group had a



dedicated exhibit table to showcase the presence of IEEE WIE affinity groups in NSW and to highlight the support provided by IEEE NSW WIE to the members. It was an exciting experience for all the WIE members as it provided the opportunity to meet and network with the wonderful women. Many members from various universities and industry visited and showed interest in starting a WIE affinity group at their respective institutions. This promotion also helped in raising the WIE membership bar.

#### **Grant Writing Workshop**

Grant writing is one of the vital aspects of the professional career development. IEEE NSW WIE affinity group has organized a workshop titled "Tips and Thoughts on Successful Grant Application" on 25<sup>th</sup> September, 2019. ARC Laureate Fellow Prof. Ian Paulsen and Dr. Yijiao Jiang (chief investigator of ARC industrial transformation research hub) were invited to share their experience on successful grant application. Dr. Ian Paulsen is distinguished professor at Macquarie University, Deputy Director of the Macquarie University Biomolecular Discovery and Design Center, and ISI highly cited researcher. The event was a great success and was attended by more than 60 attendees. The event was organized in collaboration with Macquarie University WIE, and supported by IEEE NSW YP and Macquarie University Women in Engineering Affinity groups. Such collaborative efforts elevate IEEE WIE visibility across diverse groups.

#### Meetings

Executive committee telco meetings were held almost every three months to discuss the upcoming events.

I would like to acknowledge the support and contributions of the IEEE NSW WIE executive committee members and other IEEE WIE affinity groups in NSW, for their efforts of supporting the women in STEM.

A huge thanks to the IEEE NSW Section executive committee for their support throughout the year.

Naila Mukhtar Vice-Chair, IEEE NSW WIE Affinity Group



#### Photos from some of the WIE Events





# Joint Chapter - Communications, Signal Processing and Ocean Engineering Report

#### **Engineers@Work Events**

The following events were carried out during the year 2019.

- 1. Our chapter meetings were almost all on-line or via phone. Our Events were held at different locations convenient for "Engineers@Work" participants i.e. 3 to 6pm.
- 2. 1st Event: Communications: 13th July DLT "2hr Workshop" by Dr Suresh Subramaniam, held at EA Facilities Chatswood. *Timing:* from 3 till 6pm on the 13th July 2019 *Certificate of Attendance provided*
- 2<sup>nd</sup> Event: Signal Processing: 2hr "Workshop" by Vlado Damjanovski (Author, Inventor, Industry luminary) Foxtel Campus, 5 Thomas Holt Drive, North Ryde, "Metropolis" hall Timing: from 3 till 6pm on the 23<sup>rd</sup> July 2019 Certificate of Attendance provided
- 4. UNITE: We participated in the 5min speed seminar presentations and the industry presentation/display
- 5. We inducted a student member from NSW uni to participate in our projects
- 6. We have decided on a three "Community Project" initiatives for next year which we could not do this year. Community projects are sponsored projects which will leave the "solution" at the location as a living reminder of the capability of technology to benefit social needs. We will release details of the community projects after our AGM.

We had a health issue with one of the team and this resulted in some difficulty – by we owe a big thank you to Sherry Moghadassi – for stepping in to help.

Regards for Stephen Joyce Chair 2019





### **SSIT Australia Report**

Annual Report November 2018 to November 2019.

SSIT Australia has undertaken a variety of activities and events November 2018 to November 2019.

#### Public talks/panels

The focus of the Society in 2019 was in generating public awareness around the technological dimensions to the Christchurch terror attack on 15 March. Three public workshops were held:

- Sydney 16/4
- Brisbane 17/4
- Melbourne 2/5

The talk featured Dr Andre Oboler Senior Lecturer, Monash Law School and Dr Andre Oboler is CEO of the Online Hate Prevention Institute and a Senior Lecturer.

#### Submissions

Submission to the Department of Industy, Innovation and Science's Artificial Intelligence: Australia's Ethics Framework in May 2019.

https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework/consultation/view respondent?uuld=291616467

#### Authors (in alphabetical order):

- Greg Adamson, University of Melbourne
- Simone Alesich, Independent researcher
- Morgan M. Broman, Queensland University of Technology & Griffith University
- Michael Guihot, Queensland University of Technology
- Samuli Haataja, Griffith University
- Aurélie Jacquet, Lawyer
- Michael Rigby, University of Melbourne
- Marcus Wigan, IEEE, Australian Computer Society, University of Melbourne



### **Computational Intelligence Chapter Report**

Committee communications were carried out mostly electronically; during the general meeting, there will be a plan to discuss the CI chapter vision and activities for next year 2020.

After big international and industry activities in 2018, the main activities for 2019 are:

- -Distinguished Lecture in Data Learning Decision: Innovation and Impact, 25 March 2019.
- Attend the IEEE NSW Section UNITE19, the chapter was engaged with the attendance.
- -One of the most important achievements for the chapter is the successful award of a prestigious Australian Laureate Fellowship to our CI chapter chair Distinguished Professor Jie Lu
- Starting a discussion about the plan for 2020

Adel Al-Jumaily Co-Chair



### **Education Chapter Report**

Total number of meetings: 2 Total number of events: 3

A brief summary of the events organized by Education Chapter in the year 2019 are presented here.

Workshop 1: A melange of industry speakers and undergraduate students

This workshop was held on 11<sup>th</sup> April at Macquarie University, primarily for the undergraduate students. We endeavoured to bring 3 experienced industry speakers in the workshop to talk to the students about the requirements and the skill-sets they look for during recruitment. The workshop was well attended by the students from different universities of NSW such as MQU, UTS, UNSW, USYD. After the presentations, a networking session was arranged during which the students could directly interact with the speakers one-to-one.

#### Workshop 2: WIE workshop on professional development

A WIE workshop was organized at UNITE 2019 on 9<sup>th</sup> August in collaboration with NSW WIE affinity group. In this workshop experts from academia and industry shared their experience, tips and valuable suggestions on professional development. One of the speakers shared her views on resume writing for job applications. The speakers also shared their opinion on mentoring and mentorship program which could be beneficial for the students and ECRs.

#### Event 3: Student poster competition

A technical poster competition session for all NSW undergraduate and post-graduate Engineering students was organized for the first time at UNITE 2019 on 9<sup>th</sup> August. This event was organized in collaboration with six student branches namely UTS, MQU, UOW, USYD, UNSW and WSU. Twenty-four posters from different research fields were showcased at the event. Four judges from industry and academia judged the posters.

A few photographs from these event are shared here:









### **Student Branch Report - University of Sydney**

1. Event organized in collaboration with Macquarie University and UNSW student branch

Event: ResMed Visit

Location: ResMed Manufacturing Center at Bella Vista, NSW

Date: 15<sup>th</sup> May 2019

Time: 9 AM

2. Meeting with Sasha Nikolic, Chair IEEE NSW section

Event: Usyd IEEE student branch meeting with IEEE NSW Chair Location: School of Electrical Engineering, University of Sydney,

Date: 2<sup>nd</sup> Sept 2019

Time: 5 PM

3. Events organized in collaboration with IEEE NSW AP/MTT Joint chapter

Event: Antenna Design Poster Competition and Networking Session

Location: School of Electrical Engineering, University of Sydney.

Date: 7<sup>th</sup> Nov 2019 Time: 4:00 to 6:00 PM

**Remarks:** Usyd IEEE student branch was revived again this year. Though, we couldn't organize much events till now, we are planning for one more event before the end of this year. The event would be aimed towards networking session of postgraduate students to spread more information about the IEEE student branch and bring in more participations in organizing more events next year.



### **Student Branch Report - UNSW**

#### I. How has the Club succeeded in reaching its aims and objectives in 2019?

Just being established this June 2019, the IEEE UNSW student branch aims to advance technology for humanity by i) disseminating knowledge of the theory and practice of all aspects of electrical engineering, electronics, radio, allied branches of engineering or the related arts and sciences, and by ii) furthering the technical professional development of students.

IEEE UNSW student branch was successful in achieving these by strengthening the executive team and by leveraging the IEEE network at NSW while strategically navigating the trimester transition which has greatly affected UNSW student life.

Internally, we planned and managed projects efficiently ensuring non-overlaps with the academic trimester workload, and implemented events under three main streams: technical seminars (sharing of industry professionals on how certain technology is used in industry), technical workshops (learn technical skills), and social (connecting engineers with each other).

Externally, IEEE UNSW student branch lead collaboration events with other student branches such as organising seminars for the NSW wide networking event (IEEE UNITE 2019), RESMED site visit, and IEEE Xtreme training and satellite participation.

#### **II. Student Branch Activities**

#### Summary:

- 15 technical events reaching 350 cummulated attendees
- 5 social events reaching 150 cummulated attendees

#### **Events:**

Date	Event	Туре	Estimated # of attendees
Feb 25, 2019	Inaugural General Meeting (Apply Arc affiliation)	Administrative	8
Apr 24, 2019	Motion Control PLC	Technical	40
Jun 5-6, 2019	Welcome Back	Social	50
Jun 13, 2019	An Introduction to Electronics and PCB Design	Technical	40
Jul 4, 2019	Meet and Greet BBQ + EGM	Social	41
Jul 8, 2019	Intro to Competitive Programming 01	Technical	29
Jul 20, 2019	Competitive Programming Workshop 02 - Data Structures	Technical	8
Jul 29, 2019	Competitive Programming Workshop 03 - Complete Search, Greedy	Technical	8
Aug 5, 2019	Competitive Programming Workshop 04 - Dynamic Programming Part 1	Technical	8
Sep 11-12,	O-Week	Social	70



2019			
Sep 18, 2019	Wearable Robotics Taster	Technical	8
Sep 23, 2019	Competitive Programming Workshop Dynamic Programming	Technical	8
Sep 30, 2019	Competitive Programming Workshop Graphs Part 1	Technical	8
Oct 7, 2019	Competitive Programming Workshop Graphs Part 2	Technical	8
Oct 14, 2019	Intro to Wearable Robotics Workshops - Part 1 - CAD Design	Technical	20
Oct 14, 2019	Competitive Programming Workshop Maths	Technical	8
Oct 19, 2019	IEEE Xtreme @ UNSW	Technical	10
Oct 21, 2019	Intro to Wearable Robotics Workshops - Part 2 - uC Control	Technical	15
Oct 28, 2019	Intro to Wearable Robotics Workshops - Part 3 - Human Comp Inter	Technical	15
Nov 1, 2019	IEEE UNSW AGM 2019	Social	25
Nov 11, 2019	T3 Thesis Q&A	Administrative	60

#### Collaboration:

May 13, 2019	Industrial Visit ResMed (primarily lead by MQU SB)	Technical
Aug 9,	IEEE UNITE 2019 (Arranged the A birds eye	Social
2019	view of the technological landscape: Seven of	
	the latest seminar)	

#### Awards:

- Best IEEE Milestone video NSW level: the best video was used to promote AU's first and recent IEEE milestone, specifically the reception of first communication to Earth from a human walking on the moon, 1969, at Parkes radiotelescope and Honeysuckle Creek stations.
- Won travel grant to send one delegate to Christchurch, New Zealand to participate on ANZCON 2019, a professional development conference.
- UNSW won multiple awards during the IEEE UNITE 2019 student poster competition.
   Won 2 out of 3 awards in the undergraduate division, 1<sup>st</sup> (tie) and 2<sup>nd</sup> place in the postgraduate division.
- Team unswETgwapopips ranked 5th in Australia and 112th world (out of 5000+) at IEEE Xtreme 13.0.

#### III. Membership

- Registered IEEE member: 60 -> 135
- UNSW student society registered member (SpArc): 22
  - o However, the number of people we interacted are ~100 (more than twice).
  - As IEEE UNSW SB only got affiliated with UNSW this year, we missed out Term 1 orientation week which is the time of the year where society get most of their SpArc registration.



#### IV. Financial Report

Income	
Arc Grants (UNSW student society governing body)	290.16
IEEE Grants	1142.73
Events Income	0
Total Income	1432.89
Expenditure	
Events Expenditure	1298.86
Total Expenditure	1298.86
Net Profit/Loss	134.03

#### As a general policy,

- 1. We aim to apply 65% expense from IEEE NSW section, 35% from UNSW Arc grants.
- 2. For purely IEEE NSW events, we apply 100% expense from IEEE NSW section.

#### Extra Notes:

- \$109.95 of the IEEE grant was from a joint event with MQU SB. The amount utilised by the IEEE UNSW SB is \$1,032.78.
- Arc Grants give extra incentive \$1 grant per Arc member attendee to certain IEEE UNSW SB events held on campus. The \$134.03 income was obtained from the said incentive and will be used during next year's activities (e.g., There is \$150 fee to join UNSW O week Term 1)

#### V. Executive Team

	2019	2020
Chair	Luke Wicent Sy	Logan Peters
Vice Chair (UG)	Ricco Yudha	Dominic Wong
Vice Chair (PG Research)	-	Clay Chu
Treasurer	Alan Ngo	Alan Ngo
Membership Committee Officer / Grievance Officer	Stephanie Zhen	Victor Siu
Women in Engineering Chair / Equity, Diversity and Inclusion Officer	Namalka Liyanage	Stephanie Zhen
Arc Delegate	Lorenzo Saavedra	Jennifer Liu
Publicity Officer	Dominic Wong	Eddie Wong
Program Committee Officer	Logan Peters	Ann Lam
Secretary	Madhu Murali	Steven Yuen

#### Notes:

 UNSW Arc (UNSW student society governing body) requires the following executive position: Grievance Officer, Equity, Diversity and Inclusion Officer, and Arc Delegate. Hence these positions were either created or merged with existing IEEE student branch positions.



### **Student Branch Report - Macquarie University**



#### WE LEARN AND GROW EACH DAY: WE ARE IEEE MQ STUDENT BRANCH

This year has been spectacular with lots of vibrant and useful events. The year began with a technical presentation on **Flexibility in the future multi-energy system- Case of Denmark**, by a visiting PhD student from Technical University of Denmark. It was very insightful session and the audience was captivated by the topic of discussion.

**First year Welcome:** In the beginning of the year, our student branch organized a grand welcome for first year undergraduate students to extend the reach of our student branch. This event was all fun and frolic. We briefly explained what IEEE is and what are the benefits of being a member of world's largest technical association. We attracted big crowd of young students and encouraged them to be a part of our student branch and a member of IEEE. All throughout the year, we had multiple technical lectures on topics that are of most interest to engineers of today.

**Professional Australia Workshop:** The welcome event gave a fair idea of what undergraduate wants from our student branch. Their interest lies in the event that would help them build their personality and career in future. We the organised an event "**Do you have a job locked in before you graduate?**" We invited experts from Professionals Australia to organize a workshop for students on CV and resume writing as well as maintaining a professional LinkedIn profile and how they can stand out in the crowd, which will enhance their chances of being selected for a job interview. Various **Do's and Don't's during an interview** were highlighted The workshop also covered a small one-to-one session with the experts and a small session for making the students aware of their rights as an employee and as an engineer.

**Industrial Visit:** Exposure to industries is a key component for any graduate and postgraduate degree. It not only expands the horizon but also creates a completely new world of opportunities, and springs innovative ideas in the inquisitive minds of future young professionals. Our student branch organized an Industrial Visit to ResMed as part of "IEEE opening doors" initiative. The event was a huge success with full participation and great manufacturing tour. The interactive product exhibition and presentations captivated the audience. A peek into the place that solves real world problems is quintessential. This was one of the best ventures of our student branch and it turned out to be extremely rewarding. Huge thanks to ResMed at Bella Vista and Adam Panerello for opening the doors of the industry for academia.

**IEEE- HDR Conference:** We organized IEEE HDR conference based on the pattern of an IEEE conference. It included participation from PhD students who presented their work as poster and oral presentations. It was a very successful event with a total of more than 55 participants. The winners were awardede with IEEE certficates and a small token of prize money. At the end of the event we has a panel discussion on "**Is Ph.D. enough**?" Many emeritus professors and industrialists shared their views and it was a wonderful learning experience.

**IEEE Student Activity Chair welcome:** On 19th September 2019, our IEEE student branch at Macquarie had the privilege to host the IEEE Student Activities Committee Chair Dr. Elisa Barney. Dr. Elisa Barney, visited us from Boise State University, Idaho, U.S.A. She gave our



committee a lot of insights on student engagement. Dr. Elisa also shared her experience at her university, of video conferencing industries to connect students to the industry. She explained the benefits of IEEE membership and how one can experience active involvement, while doing so she encouraged our team members to continue the membership as young professionals. Our team put together a luncheon for this meeting. She was impressed by the activities we conducted throughout the year. She also elaborated on her TEDx talk on 'Digital technology'. Dr Elisa, also shared her knowledge about IEEE day and suggested various activities for our student branch to execute.

**Engineering Breakfast:** IEEE MQ Student branch in collaboration with Macquarie University has initiated an ENGINEERING BREAKFAST series. The idea is to bring together all the engineers from around Macquarie Park area and exchange idea and gather industry specific knowledge. This event is started with a motto," By the engineers, for the engineers and about engineering". We have already enjoyed a wonderful beginning with 52 registered participants. Both students as well as industry professionals were eager to share ideas and their experience as a part of a global industry. This event was focused at bridging the gap between industry and academia. Surprisingly, most of the industry professionals were IEEE professional members.

**IEEE Xtreme Competition:** Our student branch in collaboration with IEEE UNSW student branch hosted IEEE Xtreme competition. Two teams from Macquarie University participated in the competition. Uzma Amin and Ali Lalbaksh from our team were the winners of IEEE R10 best papers award. We published various articles in R10 newsletter and circuit newsletter to highlight out presence worldwide.

**IEEE Football Match:** To end the year on an active and note we organized a friendly football match. All work and no play makes jack a dull boy.

Our student branch volunteered as well as cosponsored various events organized by IEEE WIE Affinity group at MQ and IEEE NSW education chapter. Members from our team volunteered for Cochlear Autumn School event. As an IEEE student branch, we grow together and prosper every second. We bond over activities and share responsibility as a family. I cannot thank IEEE enough for providing us this platform.

Nomination: I believe our student branch have done a spectacular job and with their effort, they have made this year a successful one. Thus, I nominate our student branch for being recognized for all the hard work, team spirit and efforts.

Nomination: I also put forward my nomination for my contributions as first women IEEE MQ SB chair. I believe I have delivered my duties, respected my position and managed my team and our student branch as a family, a strong family.

Khushboo Singh Chair (IEEE MQ SB)



### Macquarie University Women In Engineering (WIE) Affinity **Group Report**



#### **Executive Committee 2019**

Meet our energetic committee members! Chair: Naila Mukhtar Vice-Chair: Uzma Amin Secretary: Erfan Khordad Website Admin: Alice James Social Media Coordinator: Avishkar Seth

**Event Coordinator**: Ye Zhang (Janey)



IEEE MQ WIE Executive Committee Members - 2019



IEEE Women In Engineering, Macquarie University affinity group has organized several events to support Women in STEM, including Undergraduate, Postgraduate, and staff members working at Macquarie University throughout the year. Our mission at MQ is to promote gender diversity, to support women at every career level and to help them progress better in their careers.

International Women Day Celebrations - Commemorating International Women day, an event was organized, on 11<sup>th</sup> March 2019, to celebrate the achievements of women in STEM. This role-model event intended to increase the motivation and retention of Women in STEM. It also provided with networking and meetup opportunity to Macquarie University community. The event speakers included early career researchers and renowned senior professors. The event was attended by primarily members of Faculty of Science and Engineering. This successful event enabled us to promote IEEE better and we are expecting that it will generate more traction in our IEEE Membership drive in future.

MQ WIE Leadership Summit at Macquarie University - IEEE Macquarie University (MQ) WIE Affinity Group organized "MQ WIE Leadership Summit", in collaboration with local MQ WIE group on 15-April-2019, for the students and staff members of Macquarie University, and was supported by IEEE MQ Student Branch. The summit provided an opportunity to the participants to nurture their leadership skills. The summit was attended by over 70 participants. This was a whole day event with two keynote speakers and two productive panel discussions.

Keynote talks were delivered by Tracey Gramlick (Senior Analyst, CSIRO) and Professor Rose Amal (Scientia Professor and ARC Laureate Fellow at University of New South Wales). Staying true to its theme, a diverse range of panel members from Academics and Industry joined the discussions. Panel members shared their exciting experiences and gave tips on how to be a good leader. Prof. Darren Bagnall, Dean School of Engineering at Macquarie University, who was one of the panel members expressed how he has strengthened and enhanced equal opportunity and diversity friendly policies at School of Engineering over the

Support for Post-grad Students - IEEE MQ WIE focused on providing support to the students at all career levels. For post-grad PhD students, the most important question is where PhD is leading to, the event was organized to answer such queries, with a dedicated panel discussion on the topic "Is PhD Enough". The discussion was led by speakers from industry and academia. IEEE MQ WIE also supported the oral presentation session and presented an award to the best WIE oral presentation.



**Support for High School students -** MQ WIE provided voluntary support for an outreach event organized by MQ School of Engineering to promote STEM in high school students in April 2019. The outreach activity was themed "MQ in a Day" and provided a glimpse of engineering to high school students. Students got a chance of having hands-on experience with the bio-medical projects. Such events help promoting STEM to young students.

**Meetings-** During the year, executive committee meetings were held almost every two months, to discuss the upcoming events.

**Collaborative events -** IEEE WIE has organized several collaborative events and provided volunteer support with other groups and societies. Few of the supporting activities are given below:

- > WIE Workshop and Exhibit during UNITE
- > Seminar on Grant Writing application
- > Student Activities Chair Visit
- > Workshop on professional development by Professionals Australia

Awards and Recognition: This year IEEE Women In Engineering (global) committee selected IEEE Macquarie University Women in Engineering Affinity group as honorable mention on 2019 IEEE Best student branch affinity group of the year award.

WIE AG chair (2018), Naila Mukhtar was awarded with **2019 Inspiring WIE student** member of the year globally.

Uzma Amin (Macquarie University WIE member) won **2019 Best Student Paper award**. I would like to acknowledge the contributions of all the committee members of Macquarie University WIE executive committee 2019. It is the teamwork which leads to success and our WIE team over past two years has done commendable work!

Naila Mukhtar

Chair, IEEE Macquarie University Student Branch WIE Affinity Group



**Event Photos - IEEE Macquarie University Women In Engineering (WIE) Affinity Group** 





### **Student Branch Report - Western Sydney University (WSU)**

#### Manisha Arde, Chair

It's a great pleasure to announce that the Western Sydney University IEEE SB (STB38101) has been revived this year from June 2019 under the leadership of a new branch counselor Dr Ranjith Liyanapathirana. Our student member count has increased from 2 to 33 as of 16 November 2019.

The branch is going ahead with organizing activities within the scope of IEEE and also open to collaboration opportunities with other societies. The new SB executive committee consists of Chair Ms. Manisha Arde, Vice-Chair - Ronak Thaker, Secretary - Nitin Ranka and Treasurer - Timothy Villafana (See photo at right).

The team held regular meetings (face-to-face as well as using Zoom) every month to discuss the progress and to plan activities accordingly for the upcoming events.



Following is the detailed overview of all the activities of WSU IEEE SB:

- The first general meeting was held on 12/06/2019 where-in the branch counselor explained the members and potential members about the activities of IEEE and the benefits for student career development.
- SB Vice-Chair Mr Ronak represented the IEEE WSU SB at the section meeting on 01/07/2019
- The second general meeting of SB was on 30/07/2019 where-in the NSW Section Chair Dr Sasha Nikolic attended and elaborated not only the IEEE but also the flagship program of UNITE 2019.
- Vice-chair, SB Counselor and student member Ahilanjan represented the SB at UNITE program on 09/08/2019
- SB Counselor represented WSU at the section meeting held on 16/08/2019.
- SB Counselor along with Chair represented WSU at the section meeting held on 02/09/2019.
- IEEE WSU SB executive committee members had a zoom meeting on 09/09/2019 to discuss the budget details and upcoming events.
- Third general meeting of IEEE WSU SB was held on 12/09/2019 wherein, Mr Colin Elston came to share his experience related to his involvement with the IEEE and reflection on the profession. At this meeting, the MD kit was distributed to the IEEE student members.



 Zoom meeting of IEEE WSU SB was held on 26/09/2019 of executive committee members to discuss the upcoming activities.

 IEEE WSU SB has opened its social media accounts on Facebook and Instagram to connect with members and also project the activities of the IEEE

and the WSU SB.

- SB Counselor attended the Moon Landing Milestone event at Parkes, NSW on 11/10/2019. He had the opportunity to meet 2019 IEEE President-Elect Professor Toshio Fukuda who was the chief guest of the event (See photo at right).
- Vice-chair Mr Ronak attended the section meeting wherein he proposed a budget for IEEE WSU SB upcoming activities and it was approved.
- Chair Ms Manisha contributed as a volunteer in the NSW Award nomination on 15/10/2019.

which was approved by the marketing committee of WSU. Moreover, two

SB held its first event which was a technical seminar on, "Development of an Information Systems app for Agronomy" by Professor M Sreenivasulu, Telangana Agricultural University, India on 22/10/2019 at Western Sydney University which was about an interdisciplinary project funded in part by Western Sydney University to benefit farmers in India. The objective of this project matched well with the IEEE aim of "Advancing technology for the benefit of humanity." Thirteen people attended the seminar (see the photo below).





banners were printed and will be used for upcoming events and promotions (See photo at right).

- Upcoming NSW section AGM on 20/11/2019 will be attended by all the four committee members.
- The WSU Student Branch will assist the technical sessions of the International Conference on Electrical Engineering Research & Practice ICEERP (IEEE conference code 49088) to be held at Western Sydney University, Parramatta on 24-28 November 2019. This fully peer-reviewed IEEE explore published conference (www.iceerp.net.au) is aiming to provide opportunities of professional interaction amongst researchers, practising engineers, industry participants and students to present and share their latest research and practice, and to showcase the latest advancements, trends and future challenges in a broad range of disciplines related to Electrical and Electronic Engineering. IEEE WSU SB is actively working to make it a successful event.

We believe that being active SB executive will not only help the branch in uniting all the students who are seeking to connect with the professional IEEE members and to share their ideas and experiences in the field engineering and technology but also aid to have more new members.

In summary, the WSU branch has been successfully revived, and under new branch management it is working towards fulfilling the aims of the society. Membership development and holding technical and social activities for the benefit of the student members is the main goal for 2020. Voluntary service to IEEE sponsored conferences will also be a priority for the graduate student membership. In the new year we look forward to developing our web page in the IEEE domain and make an effort to connect the otherwise unconnected students studying at multiple campuses of the university.

Signed: Manisha Arde, Chair 16/11/2019



### **2018 AGM Meeting Minutes**

MEETING DATE: 21 November 2018

**LOCATION**: Rydges Sydney Central, 28 Albion Street Surry Hills

START TIME: 6:45 PM
CHAIR: Sasha Nikolic

#### 1 Welcome

Welcome by the Chair.

#### 2 Attendance and Apologies

#### **Attendance**

Syed Muzahir Abbas, Nasrin Afsarimanes, John Aitken, Naeem Akhtar, Adel Al-Jumaily, Md Eshrat E Alahi, Syed Muhammad Nawazish Ali, Uzma Amin, B M Ruhul Amin, Greg Andrews, Felipe Arrano-Vargas, Mohamed Awadallah, Naveed Aziz Khan, Affan Aziz Baba, Md Rezaul Bashar, Lyria Bennett Moses, Warisa Binte Wahab, Trevor Bird, Ian Boyd, Ray Brown, Roderick Bruggisser, Duc Thien Bui, Leonardo Callegaro, Luis Catarino, Ediz Cetin, Sudipta Chakraborty, Michael Chang, Guat Li Chew, Sanjib Choudhury, Ollencio D'souza, Colin Elston, Kusal Epa, Hossein Eslahi, Karu Esselle, Edstan Fernandez, Dimitrios Georgakopoulos, Omidreza Ghasemi, Ahmad Golgir, Graeme Gwilliam, Holmes Harvey, Saad Ul Hasan, Raheel Hashmi, Gernot Heiser, Bruce Howard, Than Zaw Htwe, Ibrahim Ibrahim, William Infante, Usama Irshad, Md Rabiul Islam, Pouya Jamborsalamati, Asanga Jayawardana, Stephen Joyce, Muhammad Kashif, Sam Khadivizand, Shakil Ahamed Khan, Gitansh Khirbat, Chul Kim, Arslan Kiyani, Andrew Kleinert, Maria Kovaleva, Dinuka Kudavithana, Animesh Kumar Sahoo, Ali Lalbakhsh, Yang Lin, Nigel Lovell, Dylan Lu, Helen Lu, Hanieh Mahvizani, Budhaditya Majumdar, Grefory Mcgarry, Amanathi Mendis, Peter Mendis, Yass Mirzaei, Joe Mok, Sayidul Morsalin, Subhas Mukhopadhyay, Naila Mukhtar, Madhu Murali, Kashem Muttaqi, Ahindra Nag, Koli Nishat, Quynh Anh Nguyen, Minh Nguyen, Sasha Nikolic, Mohammad Sohrab Hasan Nizami, Md Noman Habib Khan, Chris O'Neil, Keyurkumar Patel, Ha Pham, Bruce Poon, Noushin Poursafar, Sumedha Prabhu, Ricco Yudha Pratama, Meilin Qian, Irina Rabeja, Christian Rojas, Deon Rowley, Joanne Rowley, Alejandro Ruiz Rivera, Golam Sarwer, Abu Sadat Md Sayem, Vivek Sharma Sharma, J Shen, Khushboo Singh, Bill Sloman, Luke Wicent Sy, Ajay Taneja, Graham Town, Dinindu Koliya Harshanath Webadu Wedanage, Wijayakumara Weerasinghe, Harith Wickramasinghe, John Ypsilantis, Antony Zaglas, Yuxiang Zhu.

#### **Apologies**

Georgios Konstantinou, John Ypsilantis, Ramutis Zakarevicius, Stefan Mozar, David Tien.

#### 3 Minutes

That the Minutes of 2017 Annual General Meeting, 16 November 2017 AGM be accepted.

Moved Chris O'Neil, seconded Minh Nguyen. Carried.

#### 5 Chair's Report 2018 - Sasha Nikolic

The Chair welcomed invited guests: Ediz Cetin, representing the IET; Peter Veron and Ella Averill-Russell, representing the IICA.

The Chair reviewed the Section's achievements during 2018, including:



- UNITE2018, an informal gathering on 10 August of many members of the NSW Section from all chapters and grades – this was a great success, providing opportunities for networking and stimulating interest in the IEEE.
- 2018 Outstanding Section Membership Recruitment Performance Award
- Sponsorship of members to attend the IEEE Women in Engineering International Leadership Summit in Brisbane in December 2018.
- Creation of an IEEE LinkedIn Group and Facebook group.
- A total of 114 events were held by NSW Section up to 6 November 2018. This compares with only 95 events the previous year.
- There are now active student branches in each of the major universities, with branches at UNSW, USYD, UTS, MQU and UOW.
- A mentoring program for student groups will begin in 2019, coordinated by Trevor Kleinert.
- The Section provided substantial funding for TENSYMP 2018, with a 70% financial stake.
- TALE 2018 will be held in Wollongong in December 2018. This conference has much greater registrations than its predecessors.
- The 2018 IEEE Fellows dinner was held and was well attended.
- Position descriptions, including activities month by month, have been prepared and reviewed by the Section Committee.

#### The vision for 2019 includes a focus on:

- Humanitarian Activities e.g. IEEE SIGHT
- Greater value for industry / industry members
- Professional Development
- Greater recognition for participation (certificates, CPD points etc.)
- Wider Community Participation
- Encouraging more members to volunteer and contribute.

The 20<sup>th</sup> Anniversary of Globecom 98 was noted, with a review of the conference and the organising committee. This was the first major IEEE conference held in Australia and only the second Globecom held outside the USA. It was a great success in every way and provided a sound financial footing for the NSW Section.

John Robinson, a former Chair and active volunteer in the IEEE and NSW Section in particular passed away at Ashburn House Gladesville aged care facility on Saturday 1 September 2018. The Chair acknowledged John's magnificent contribution to IEEE. Many IEEE members attended John's funeral.

The Instrumentation & Measurement Society Chapter was formed in 2018 and has been very active, with one workshop, eight technical seminars and four committee meetings.

#### 6 Treasurer's Report 2018 – Ray Brown

The Treasurer presented and summarised the financial reports that had been circulated prior to the meeting. There was discussion of the overall financial strategy.



#### 7 Incoming 2019 NSW Section Committee

Greg Andrews announced the results of the election for Section Committee:

Past Chair: Karu Esselle (unchanged)
Chair: Sasha Nikolic (unchanged)

Vice-Chair: Georgios Konstantinou (unchanged)
Treasurer: Mahmood Elkhodr (replaces Ray Brown)

Secretary: Vacant (replaces John Aitken).

#### 8 NSW Section Awards

The following awards were presented by the Chair:

- NSW Outstanding Volunteer Prof Subhas Mukhopadhyay for his outstanding contributions to the IEEE especially IEEE Sensors Council, IEEE IMS society and IEEE NSW.
- **NSW Outstanding Young Professional** *Dr Raheel Hashmi* for excellence in leadership and notable contributions to IEEE Young Professionals and IEEE in New South Wales, demonstrated through technical and professional development initiatives.
- Commendation Young Professional Dr Sudipta Chakraborty for her contributions to IEEE in NSW, the Education Chapter and Women in Engineering Education.
- NSW Outstanding Student Volunteer Asanga Jayawardana for his outstanding contributions to IEEE Student Branch of the University of Wollongong, IEEEXtreme competition and IEEE NSW.
- Commendation Student Volunteer Mohamed Mahmoud Zakaria Awadallah for his contributions to IEEE in NSW and IEEE Student Branch of the University of Technology Sydney.

#### 9 Region 10 Awards

**R10 Outstanding Volunteer Award** - *David Tien* in recognition of outstanding contribution and services to the IEEE New South Wales Section and IEEE Region 10

**Region 10 Student Paper Contest -** 1<sup>st</sup> Place Postgraduate: *Ali Lalbakhsh* from Macquarie University



#### 10 Australia Council Awards

#### **Student Branch Competition**

2nd Place: Macquarie University and University of Wollongong (equal placing).

Commendation: University of Technology Sydney

#### **Postgraduate Student Paper Competition**

2nd Place: Mohamed Mahmoud Zakaria Awadallah (University of Technology

Sydney)

Commendation: Harith Roshana Wickramasinghe (University of New South

Wales)

#### **Undergraduate Project Award:**

1st Place: Yang Lin.

#### 11 IEEE Xtreme Award 2018

### Top 100 World Placing (84/4094) and 1st Place in Australia:

Anh Minh Le, Duc Thien Bui, Minh Nguyen (University of Wollongong)

#### 12 Members' questions and comments

The application of GST to events related to the Section (particularly TENSYMP 2018) was discussed in answer to a question from A Zaglas.

There was discussion of the probity of members of the Section Committee proposing that the Minutes of the previous AGM be accepted.

13 The AGM was closed at 7:45 pm



### **IEEE NSW Section activities list in 2019**

	Event Title	<b>Event Date</b>
1	Private Information Retrieval: An Information Theoretic Approach : New South Wales Section Affinity Group,LM	4/02/2019 14:00
2	IEEE NSW Section Committee Meeting February 2019 : New South Wales Section	4/02/2019 19:00
3	Past, Present and Future of Wireless Charging for Portable Electronics: New South Wales Jt. Chapter, IE13/IA34/PEL35 Advanced Power Converters in Battery Energy Storage Systems for More-	7/02/2019 11:00
4	electric Smart Cities : New South Wales Section Chapter, PE31 Flexibility in the future multi-energy system – Case of Denmark :	12/02/2019 11:00
5	Macquarie Univ  Trusted Autonomous Systems as System of Systems : New South Wales	12/02/2019 15:00
6	Sec Jt Chpt CAS04/PHO36/SSC37/ED15  IEEE NSW Section, Student Branch and Chapter Planning and Training:	19/02/2019 10:30
7	Sydney University of Technology  Distinguished Lecture: New Forms of Microscopy Enabled by	22/02/2019 10:00
8	Nanostructured Surfaces: New South Wales Sec Jt Chpt CAS04/PHO36/SSC37/ED15	25/02/2019 13:00
9	Recovery Algorithm Design for Generalized Linear Models via Standard Approximate Bayesian Inference: Wollongong Univ Of	26/02/2019 11:00
10	JILS - Transformers:Metering, Heating and Harmonics : New South Wales Section Chapter, PE31	1/03/2019 17:30
11	Cognitive Illusions in Virtual Reality: What do I mean? And why should you care? : New South Wales Section Chapter, C16	4/03/2019 10:30
12	Distinguished Lecture: Automotive Radar – A Signal Processing Perspective on Current Technology and Future Systems: New South Wales Section Jt. Chapter, AP03/MTT17 DISTINGUISHED LECTURE: AUTOMOTIVE RADAR – A SIGNAL	5/03/2019 10:00
13	PROCESSING PERSPECTIVE ON CURRENT TECHNOLOGY AND FUTURE SYSTEMS : Macquarie Univ	5/03/2019 10:00
14	First Year Engineering Welcome (GAMES,GIFTS,FOOD & FUN-GUARANTEED) : Macquarie Univ	6/03/2019 12:30
15	"What is Engineering ?" : Wollongong Univ Of	8/03/2019 14:00
16	International Women Day - Let's Celebrate Together at MQ : Macquarie Univ, WIE	11/03/2019 15:00
17	NSW Section March Committee Meeting : New South Wales Section	11/03/2019 19:00
18	UOW Venue - IEEE Communications Society Distinguished Lecture Dr Suresh Subramaniam : New South Wales Section Jt Chapter,SP01/COM19/OE22	12/03/2019 11:30
19	Young Professionals Networking : New South Wales Section Affinity Group,YP	12/03/2019 18:00
20	Clubs Day Promotion IAS UoW Student Branch Chapter: University of Wollongong, IA34	13/03/2019 11:00
	Sydney Venue - IEEE Communications Society Distinguished Lecture Dr Suresh Subramaniam : New South Wales Section Jt	40/00/0040 40 00
21	Chapter,SP01/COM19/OE22	13/03/2019 12:00
22	Evolving and Designing the 30-minute City: Wollongong Univ Of The Evolution of Data Center Network Architectures: New South Wales	13/03/2019 14:30
23	Section Jt Chapter, SP01/COM19/OE22  JILS - Thin Film PV Offers a green future : New South Wales Sec Jt Chpt	13/03/2019 15:36
24	CAS04/PHO36/SSC37/ED15	14/03/2019 17:30
25	Committee Meeting: New South Wales Section Chapter, IM09	19/03/2019 12:10
26	Data - Learning - Decision: Innovation and Impact : New South Wales Section Chapter, CIS11	25/03/2019 17:00



27	Natural hazards and social vulnerability of place: the strength-based approach: Wollongong Univ Of	26/03/2019 10:30
28	Guest Lecture: Harmonising Engineering Education with Nature: New South Wales Section Jt. Chapter, AP03/MTT17	26/03/2019 10:45
29	JILS - Essential Elements of Surge Protection : New South Wales Section Chapter, DEI32	26/03/2019 17:30
30	IICA Technology Expo Wollongong : New South Wales Section Chapter, IM09	27/03/2019 14:00
31	VTS NSW Chapter Meeting March 2019 : New South Wales Section Chapter, VT06	1/04/2019 11:00
32	NSW Section April Committee Meeting : New South Wales Section	1/04/2019 19:00
33	IEEE UOW STUDENT BRANCH BBQ : Wollongong Univ Of	5/04/2019 11:30
34	A melange of industry speakers and undergraduates: New South Wales Section Chapter, E25	11/04/2019 15:00
35	Do you want to have a job locked in before you graduate? : Macquarie Univ	12/04/2019 14:30
36	MQ Women in Engineering Leadership Summit: Macquarie Univ, WIE	15/04/2019 9:00
37	Seminar on advanced and smart technical writing: University of Wollongong, IA34	15/04/2019 11:00
38	Crash Course in C language : Wollongong Univ Of	16/04/2019 14:30
39	Can we win the war against online hate? : Victorian/ACT/NSW/Qld/SA/WA Jt Chap, SIT30	16/04/2019 17:30
	Queensland -Can we win the war against hate? Tackling Online Hate and Extremism after Christchurch: Victorian/ACT/NSW/Qld/SA/WA Jt Chap,	
40	SIT30	17/04/2019 17:30
41	Motion Control using PLCs (Programmable Logic Controllers): Univ Of New South Wales	24/04/2019 13:00
42	GULLEN RANGE WIND AND SOLAR FARM FIELD TRIP : Wollongong Univ Of, PE31	30/04/2019 8:30
43	Education Chapter meeting: New South Wales Section Chapter, E25	2/05/2019 14:00
44	Victoria - Can we win the war against hate? Tackling Online Hate and Extremism after Christchurch: Victorian/ACT/NSW/Qld/SA/WA Jt Chap, SIT30	2/05/2019 17:30
	Digital Twins: How Real-Time Simulation is Helping Create the Power	
4.5	Generation, Power System Control and Management and CyberSecurity	0/05/0040 44 00
45	Solutions of the Future: New South Wales Section Chapter, PE31	3/05/2019 11:00
	Technical Seminar: Advanced terahertz device and system based on resonant tunneling diode and photonic crystal: New South Wales Section	
46	Jt. Chapter, AP03/MTT17	3/05/2019 15:00
	VTS NSW Chapter Meeting May 2019 : New South Wales Section	
47	Chapter, VT06	6/05/2019 11:00
48	NSW Section Chapter Chair Meeting : New South Wales Section	6/05/2019 12:30
49	NSW Section May Committee Meeting : New South Wales Section	6/05/2019 19:00
	JILS - Energy Storage: Current and emerging solutions for enabling	
50	renewable energy development : New South Wales Jt. Chapter, IE13/IA34/PEL35	9/05/2019 17:30
30	IICA Technology Expo Newcastle : New South Wales Section Affinity	3/03/2013 17:30
51	Group,YP	15/05/2019 2:00
52	IEEE Opening Doors Initiative: INDUSTRIAL VISIT : Macquarie Univ	15/05/2019 9:30
53	Electrical capacitance tomography and industrial applications: New South Wales Section Chapter, IM09	16/05/2019 11:00
54	The R Programming Language: Essential Tools for Academics: New South Wales Section Chapter, E35	21/05/2010 10:00
54	South Wales Section Chapter, E25 HANDS-ON WORKSHOP: demonstrates how inventors can complete one	21/05/2019 10:00
	provisional "utility― patent application : Sydney University of	
55	Technology	22/05/2019 9:30
56	JILS: Designing Safety Critical Electronics and Software : New South	23/05/2019 17:30



	Wales Jt. Chapter, IE13/IA34/PEL35	
	Industrial Exposture to Future Career Opportunities : University of	
57	Wollongong, IA34	24/05/2019 14:00
58	Measurements on beams of particle accelerators: the CERN CLEAR facility: New South Wales Section Chapter, IM09	30/05/2019 11:00
59	Workshop in Power Engineering : Wollongong Univ Of	31/05/2019 11:30
60	VTS NSW Chapter Meeting: New South Wales Section Chapter, VT06	3/06/2019 11:00
61	NSW Section June Committee Meeting : New South Wales Section	3/06/2019 19:00
62	Welcome Back Week at UNSW Day 1 : Univ Of New South Wales	4/06/2019 10:00
63	Welcome Back Week at UNSW Day 2 : Univ Of New South Wales	6/06/2019 10:00
64	End of Session BBQ : Wollongong Univ Of	8/06/2019 16:20
0.	JILS - Anything is possible: celebrating the past, present and future! :	0,00,20101010
65	Charles Sturt Univ	11/06/2019 18:00
66	Western Sydney University SB ExCom meeting : Western Sydney Univ Of	12/06/2019 10:30
67	An Introduction to Electronics and PCB Design: Univ Of New South Wales	13/06/2019 10:00
68	Random Access for Machine-type Communications: New South Wales Section Jt Chapter, SP01/COM19/OE22	13/06/2019 11:00
00	JILS - 3D Prototypes to Production : New South Wales Sec Jt Chpt	13/00/2019 11.00
69	CAS04/PHO36/SSC37/ED15	13/06/2019 17:30
70	ORAL PRESENTATION AT HDR CONFERENCE : Macquarie Univ	20/06/2019 8:30
74	Is PhD Enough- Panel Discussion at MQ HDR Conference : Macquarie	00/00/0040 45 00
71	Univ, WIE	20/06/2019 15:00
72	POSTER PRESENTATION AT HDR CONFERENCE : Macquarie Univ Using Artificial Intelligence and Computer Vision to Automate Corridor	20/06/2019 16:00
	Inspections and Predict Rail Maintenance : New South Wales Section	
73	Chapter, C16	25/06/2019 13:30
7.4	Distinguished Lecture (AP) - Terminal Antenna Design for Future Wireless	05/00/0040 44:00
74	: New South Wales Section Jt. Chapter, AP03/MTT17  Lens antennas: Fundamentals and present applications: New South	25/06/2019 14:30
75	Wales Section Jt. Chapter, AP03/MTT17	27/06/2019 15:00
70	JILS - Electric Vehicle Charging from Tesla to Chargefox : New South	07/00/0040 47:00
76	Wales Section Chapter, VT06	27/06/2019 17:30
77	IEEE IAS UOW Research Forum 1 : University of Wollongong, IA34  Distinguished Lecture (AP): Higher symmetries: A new degree of freedom	28/06/2019 9:00
	for the design of periodic structures: New South Wales Section Jt.	
78	Chapter, AP03/MTT17	28/06/2019 11:00
79	NSW Section July Committee Meeting : New South Wales Section	1/07/2019 19:00
80	IEEE UNSW Meet and Greet BBQ : Univ Of New South Wales	4/07/2019 12:00
81	IEEE IAS UOW Research Forum 2 : University of Wollongong, IA34	5/07/2019 9:00
82	Introduction to Competitive Programming : Univ Of New South Wales	8/07/2019 17:00
83	Distinguished Lecturer by IEEE VTS NSW Chapter : New South Wales Section Chapter, VT06	15/07/2019 14:00
03	Workshop on "Application of Model Predictive Control in Modern	15/07/2019 14.00
84	Engineering": University of Wollongong, IA34	19/07/2019 9:30
0.5	Competitive Programming Workshop 02 - Data Structures : Univ Of New	00/07/0040 40 00
85	South Wales O-Week Festival University of Wollongong: University of Wollongong,	20/07/2019 13:00
86	IA34	22/07/2019 9:00
	Automating Spatial Frequency Analysis of Camera Performance & Signal	
87	Quality: New South Wales Section Jt Chapter, SP01/COM19/OE22	23/07/2019 15:00
	Software Automated Spatial Frequency Analysis to test Video Performance & Signal Quality: New South Wales Section Jt	
88	Chapter,SP01/COM19/OE22	23/07/2019 15:00
89	VTS NSW Chapter Meeting : New South Wales Section Chapter, VT06	24/07/2019 14:00
90	IEEE IMS NSW Chapter, Sydney 3rd Annual Workshop on Sensors,	25/07/2019 9:30
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	Instrumentation and Measurements: Theory and Applications: New South Wales Section Chapter, IM09	
91	IEEE IMS NSW Chapter Ex-Comm meeting : New South Wales Section Chapter, IM09	25/07/2019 12:30
	IEEE PES Distinguished Lecture - Polygonal Voltage Space Vector	
92	Generation Using Switched Capacitive Filters for Drive Applications : New South Wales Jt. Chapter, IE13/IA34/PEL35	25/07/2019 17:00
93	JILS: Drones - Evolution of Unmanned Systems Design : New South Wales Section Affinity Group, YP	25/07/2019 17:30
94	Competitive Programming Workshop 03 - Complete Search, Divide & Conquer, Greedy : Univ Of New South Wales	29/07/2019 17:00
95	Why Join the IEEE: Western Sydney Univ Of	30/07/2019 11:30
96	IEEE VTS NSW Chapter Distinguished Lecture : New South Wales Section Chapter, VT06	31/07/2019 13:00
97	Competitive Programming Workshop 04 - Dynamic Programming Part 1 : Univ Of New South Wales	5/08/2019 17:00
-	JILS: New Electronics to Meet the Computing Energy Challenge: New	5,00,2010 11100
98	South Wales Section Chapter, PE31	6/08/2019 17:30
99	IEEE UOW IAS Clubs Day Spring 2019 : University of Wollongong, IA34	7/08/2019 9:30
100	UNITE2019 - Professional Development Skills for WIE : New South Wales Section Affinity Group, WIE	9/08/2019 16:00
101	UNITE2019 - Becoming an IEEE Senior Member : New South Wales Section Affinity Group,YP	9/08/2019 16:00
	UNITE2019 - Innovation and Collaboration in the Start-up world: New	
102	South Wales Section Affinity Group, YP UNITE2019 - Process and tips to become an IEEE Fellow : New South	9/08/2019 16:10
103	Wales Section Chapter, IM09	9/08/2019 16:25
404	UNITE2019 - A birds eye view of the technological landscape: Seven of	0/00/0040 47 00
104	the latest: New South Wales Section Affinity Group, YP	9/08/2019 17:00
105	UNITE2019 - Industry Focused Power Quality Research : New South Wales Section Chapter, PE31	9/08/2019 17:00
106	UNITE2019 - Building a LinkedIn profile to capture attention : New South Wales Section Affinity Group,YP	9/08/2019 17:45
107	UNITE2019 - Australia's Past, Present and Future in Space Technology : New South Wales Section Affinity Group,LM	9/08/2019 17:45
107	UNITE2019 - Al In Practice - Common Use Cases, Successes, and	9/06/2019 17.45
108	Blockers within Industry: New South Wales Section Chapter, C16	9/08/2019 17:45
109	Under-graduate and Post-graduate Poster Competition at UNITE2019 : New South Wales Section Chapter, E25	9/08/2019 18:30
110	IEEE NSW UNITE2019 - The Networking Component : New South Wales Section Affinity Group,LM	9/08/2019 18:30
	IEEE IMS NSW Chapter Ex-Comm meeting : New South Wales Section	
111	Chapter, IM09	9/08/2019 18:47
112	SB Meeting (Western Sydney University) : Western Sydney Univ Of	15/08/2019 13:00
113	VTS NSW Chapter Meeting : New South Wales Section Chapter, VT06  Josephson Arbitrary Waveform Synthesizer as a quantum standard of	21/08/2019 15:00
114	voltage and current harmonics: New South Wales Section Chapter, IM09	22/08/2019 16:00
115	JILS - Using Virtual Reality (VR) in the retail sector for testing and agility : New South Wales Section Jt Chpt, CE08/BT02/PSE43	22/08/2019 17:30
116	An Acute Respiratory Infection (ARI) Monitor to Detect Infant Pneumonia : New South Wales Section Chapter, IM09	27/08/2019 12:00
	Altair Feko(TM) Workshop: Application for High Frequency Simulation :	
117	New South Wales Section Jt. Chapter, AP03/MTT17  Reinforcement learning-based thermal comfort control for vehicle cabins:	2/09/2019 9:00
118	New South Wales Section Chapter, IM09	2/09/2019 10:00
119	Meeting with IEEE NSW Chair : Sydney Univ	2/09/2019 17:00
120	NSW Section September Committee Meeting : New South Wales Section	2/09/2019 19:00



121	The role of IoT in advancing Humanitarian Energy Infrastructure : New South Wales Section Chapter, IM09	4/09/2019 10:00
122	SB Executive committee members Zoom meeting: Western Sydney Univ	9/09/2019 13:30
123	JILS - Testing LV assemblies to the AS/NZS 61439 product standards : New South Wales Section	9/09/2019 17:30
124	IEEEXtreeme Promotional BBQ : Wollongong Univ Of	10/09/2019 11:00
125	Orientation Week at UNSW: Univ Of New South Wales	12/09/2019 12:00
126	Western Sydney University SB General Meeting: Western Sydney Univ Of	12/09/2019 13:30
127	Communications and Automotive Day 2019 (Sponsored by VTS NSW Chapter): New South Wales Section Chapter, VT06	19/09/2019 10:00
128	IEEE IAS UOW Student Branch Chapter Annual General Meeting: University of Wollongong, IA34	19/09/2019 11:00
129	2019 AGM (IEEE PES UOW): Wollongong Univ Of, PE31	19/09/2019 12:00
	Welcoming IEEE SAC Chair (A visit to Macquarie University SB):	
130	Macquarie Univ	19/09/2019 14:00
131	Competitive Programming Workshop 05 - Dynamic Programming Part 2 : Univ Of New South Wales	23/09/2019 18:00
132	Enginnering Breakfast : Macquarie Univ	24/09/2019 7:30
133	Tips and Thoughts on Successful Grant Application : New South Wales Section Affinity Group, WIE	25/09/2019 14:00
134	Zoom meeting of IEEE WSU SB: Western Sydney Univ Of	26/09/2019 13:30
	JILS - From Inverter Standards to Understanding Inverter Behaviour for Small-scale Distributed Generation : New South Wales Section Chapter,	
135	PE31	26/09/2019 17:30
136	Competitive Programming Workshop 06 - Graphs Part 1 : Univ Of New South Wales	30/09/2019 18:00
137	IEEE Day @ MQ : Macquarie Univ	1/10/2019 17:30
138	Women in Engineering and IT Symposium : New South Wales Section Affinity Group, WIE	3/10/2019 9:00
139	Competitive Programming Workshop 07 - Graphs Part 2 : Univ Of New South Wales	7/10/2019 18:00
140	IEEE x WIT x SE: UNSW Site Tour & Discussion Panel : Univ Of New South Wales	9/10/2019 10:45
141	Chapter Executives Meeting: New South Wales Section Jt. Chapter, AP03/MTT17	9/10/2019 16:00
142	Presentation - Prof. Toshio Fukuda and Prof. Akinori Nishihara : New South Wales Section Chapter,RA24	10/10/2019 12:30
143	IEEE NSW Section Moon Landing Milestone Event : New South Wales Section Affinity Group,LM	11/10/2019 11:00
	Distinguished Lecture on Reflectarray Antennas: Theory, Designs, And	
144	Applications: New South Wales Section Jt. Chapter, AP03/MTT17 Introduction to Wearable Robotics Part 1 - CAD Design of an Exoskeleton	11/10/2019 11:00
145	Arm: Univ Of New South Wales Competitive Programming Workshop 08 - Maths: Univ Of New South	14/10/2019 11:00
146	Wales	14/10/2019 18:00
147	NSW Section October Committee Meeting : New South Wales Section	14/10/2019 19:00
148	Xtreme 13.0 @ UNSW : Univ Of New South Wales	19/10/2019 10:30
149	IEEEXtreme Programming Competition UoW Student Branch : Wollongong Univ Of	19/10/2019 11:00
150	Introduction to Wearable Robotics Part 2 - uC Programming to Control an Exoskeleton Arm : Univ Of New South Wales	21/10/2019 11:00
151	Technical Seminar: "Emerging Technologies of NBN Rollout" : Western Sydney Univ Of	22/10/2019 10:00
152	Technical Seminar on "Development of an Information Systems App for Agronomy" : Western Sydney Univ Of	22/10/2019 10:15
153	Centre for Digital Transformation (CDT) and IEEE NSW Computer Society	24/10/2019 13:00
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	Joint Research Seminar : New South Wales Section Chapter, C16	
154	JILS - Vibration and Shock Testing : New South Wales Sec Jt Chpt CAS04/PHO36/SSC37/ED15	24/10/2019 17:30
	Introduction to Wearable Robotics Part 3 - Exoskeleton Arm to Computer	
155	Interface : Univ Of New South Wales	28/10/2019 11:00
	IICA Technology Expo Sydney : New South Wales Jt. Chapter,	
156	IE13/IA34/PEL35	30/10/2019 14:00
157	Week 7: AGM 2019/2020 - IEEE UNSW Student Branch: Univ Of New South Wales	1/11/2010 11:00
157		1/11/2019 11:00
158	IEEE MQU Football Match : Macquarie Univ	6/11/2019 17:29
450	Visit UTS Data Arena & Lunch : New South Wales Section Affinity	7/44/2040 42:45
159	Group,LM Antenna Design Poster Competition and Networking Session : New South	7/11/2019 12:15
160	Wales Section Jt. Chapter, AP03/MTT17	7/11/2019 16:00
100	Special Seminar on Adaptive META Antennas for New Space Applications	7/11/2019 10.00
	such as IoT, 5G, HTS, GNSS, etc.: New South Wales Section Jt.	
161	Chapter, AP03/MTT17	13/11/2019 12:00
	Undergraduate Thesis Workshop and Discussion Q&A: Univ Of New	
162	South Wales	15/11/2019 12:00
163	IEEE UOW Student Branch AGM 2019 : Wollongong Univ Of	19/11/2019 11:00
	Translating Computer Vision Research to Real-world Applications : New	
164	South Wales Section Chapter, SEN39	19/11/2019 14:00
	AGM - Joint Chapter Broadcast Technology, Consumer Electronics &	
40=	Product Safety Engineering : New South Wales Section Jt Chpt,	00/44/0040 40 00
165	CE08/BT02/PSE43	20/11/2019 18:00
166	AGM - Life Members Affinity Group : New South Wales Section Affinity Group,LM	20/44/2040 40:25
166		20/11/2019 18:25
167	NSW Section 2019 AGM : New South Wales Section	20/11/2019 18:45
168	NSW Section 2019 AGM and Awards Dinner: New South Wales Section	20/11/2019 19:45
400	2019 International Conference on Electrical Engineering Research &	0.4/4.4/00.40.0.00
169	Practice (ICEERP): New South Wales Section Chapter, PE31	24/11/2019 9:00
470	2019 International Conference of Internet of Things Research and Practice	0.4/4.4/004.0.04.00
170	Technical: New South Wales Section Chapter, C16  JILS - Australia's involvement in Space Projects: New South Wales	24/11/2019 21:00
171	Section	28/11/2019 17:30
171	IEEE VTS NSW Chapter Distinguished Lecture : New South Wales	20/11/2019 17.30
172	Section Chapter, VT06	3/12/2019 14:00
_	Inaugural Ceremony of the IEEE NSW Sensors Council Chapter : New	
173	South Wales Section Chapter, SEN39	4/12/2019 14:00



#### Current Status as of 19 Nov:

Name	Events
University of New South Wales Student Branch	21
New South Wales Section	
Instruments & Measurements Chapter	
Joint Antennas & Propagation / Microwave Theory and Techniques Chapter	
Macquarie University Student Branch	
University of Wollongong Student Branch	11
Vehicular Technology Chapter	10
University of Wollongong Student Branch Industrial Applications Chapter	9
Western Sydney University Student Branch	
Power & Energy Chapter	7
Young Professionals Affinity Group	7
Joint Communications / Signal Processing / Oceanic Chapter	6
Life Members Affinity Group	6
Computer Chapter	5
Joint Power Electronics / Industry Applications / Industrial Electronics Chapter	5
Joint Photonics / Solid-State Circuits / Circuits and Systems / Electronic Devices Chapter	5
Education Chapter	4
Joint Social Implications of Technology Chapter	3
Macquarie University Student Branch Women in Engineering Affinity Group	3
Women in Engineering Affinity Group	3
Joint Broadcast Technology/Consumer Electronics/Product Safety Engineering Chapter	2
Sensors Council Chapter *Recently formed	2
University of Wollongong Student Branch Power and Energy Chapter	2
University of Technology Sydney Student Branch	2
Dielectrics and Electrical Insulation Chapter	1
Computational Intelligence Chapter	1
Robotics and Automation Chapter *Recently formed	1
Charles Sturt University Student Branch	1
University of Sydney Student Branch	1
Engineering in Medicine & Biology Chapter	0
Joint ACT & NSW Geoscience & Remote Sensing Chapter	
Systems, Man and Cybernetics Chapter	
Electromagnetic Compatibility Chapter	0
Grand Total	173