

Institute of Electrical and Electronics Engineers Queensland Section (ABN 67 431 648 974) <u>ieee-qld.org</u>

IEEE QUEENSLAND SECTION NEWSLETTER

April 2018

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Section Chair's Report



Daniel Eghbal m.eghbal@ieee.org

Welcome to the first newsletter issue of IEEE Queensland Section in 2018.

The newsletter has been the main communication channel for us to report our activities with our members. Even, these days with number of other platforms available to us (including social media), I still believe the newsletter provides benefit to our members and has proven to be a good archive when retrieving our history.

My report includes a summary of 2017 Annual General Meeting and a brief report from the Region 10 annual meeting 3-4 March 2018 in Langkawi Island, Malaysia.

On the afternoon of 14 November 2018, 64 delegates gathered at the Brisbane Convention and Exhibition Centre (BCEC) to attend the 2017 IEEE QLD Section AGM and the award dinner ceremony. *Dr.Shane Arnott* from *Phantom Works International, Boeing Defence, Space & Security* was the keynote speaker and gave a very interesting and insightful presentation on "Playing on the global stage Australia's place in the Innovation food chain".



I would like to thank BCEC for hosting our AGM, Dr.Shane Arnott for his outstanding presentation and Noja Power for their support. Following each year's tradition, Queensland Section student thesis awards were presented during the dinner ceremony. Also, some of our volunteers were recognised for their outstanding service in 2016. A complete list of award winners is included in the <u>AGM Report</u>. A few photos of the AGM and the dinner function are included in this report. More photos from the AGM will be available from the website.





You can find a copy of 2017 AGM report from <u>here</u>. Copies of previous AGM reports can also be downloaded from the <u>Archive</u> section. Once approved, the minutes of the AGM will be available from the <u>website</u>. The minutes will be considered for approval at 2018 AGM meeting later this year. I would like to thank David Russel, Section Newsletter Editor, for his efforts in preparing the AGM report and also recording the meeting minutes.

IEEE Region 10 executive committee and section chairs get together once a year at R10 annual meeting to share experiences and discuss future direction face to face. 2018 IEEE Region 10 annual meeting was held in Langkawi Island, Malaysia on 3-4 March 2018. On behalf of IEEE Queensland Section, I attended the meeting. I also attended the Australia Council face to face meeting on 2 March to represent Queensland Section.

Highlights from the R10 meeting are:

Dr.Zia Ahmed from Australia who is currently Australia Council Chair was announced as one of the three candidates for the IEEE Region 10 director Elect (to serve 2021-2022). This is a great opportunity for Australasian members and I strongly encourage consider you to participating in the election. Historically, the rate of participation

in the elections has been very low from Australia. This is a great opportunity for all of us to make sure we have a presence in the Region 10 leadership.

- Region 10 is still the largest region in the IEEE and is growing (mostly in China and India). Diversity is of the strength and unique features of Region 10. But unfortunately, diversity in membership is not properly reflected in the R10 executive committee.
- Membership development and retaining members are very critical. Providing more tailored benefits to IEEE members at different levels is very important to attract and retain members.
- Student members are the future leaders of our society. Recruiting new student members and retaining student members are very important.
- Similar to other regions, retaining student members after graduation remains a challenge. This is an area where tailored programs need to be initiated based on student needs.
- Prof.Akinori Nishihara, R10 Director Elect for 2019-2020, attended the Australia Council meeting and briefly shared his priorities with Australia Council members. Prof. Nishihara promised to consider Australia as a venue for 2019 IEEE Region 10 meeting.
- Professor Toshio Fukuda from Region 10 is one the candidates for IEEE President Elect 2019-2020. This is the first time that Region 10 has a candidate for IEEE President Elect. I strongly encourage you to consider participating in the election when it opens.



Prior to the R10 meeting, I also attended the Australia Council meeting. This was the only face to face Australia Council meeting and provided an opportunity to meet other Australian Section chairs and discuss Australia wide activities such as the student paper competition. 2018 Women in Engineering International Leadership Summit to be held in Brisbane, and 2018 **IEEE TENSYMP** to be held in Sydney 4-6 July 2018. The theme of the TENSYMP 2018 is Impact of the Internet of Things. I encourage you to consider attending the symposium, which is hosted by IEEE New South Wales (NSW) Section.



(L to R) Stefan Mozar (R10 IR Coordinator, TENSYMP2018 General Chair), Ross Summerfield (ACT Section Chair), Sasha Nikolic (NSW Section Chair at the back), Alan Harvey (VIC Section Chair), Pina Dall'Armi-Stok (South Australia), Andrew Berry (New Zealand South Section Representative) at the back, IEEE President-Elect Jim Jefferies, Vincenzo Piuri (Candidate for IEEE President Elect 2019-2020), Donald Bailey (New Zealand Central Section), Zia Ahmed (AC Chair), Daniel Eghbal (Queensland), Toshio Fukuda (Candidate for IEEE President Elect 2019-2020) and Greg Elkins (Northern Australia Section Chair)

In Queensland Section, we have another busy year with number of flagship events. Two major upcoming IEEE events in Brisbane are International Conference in Radar (27-30 August 2018) and IEEE Women In Engineering International Leadership Summit (WIE ILS), 26-27 November 2018 in Brisbane. This is the first time that a WIE Leadership Summit is being held in Australia and it will create a great opportunity for our WIE members. I would like to acknowledge and thank Dr.Marie-Luise Wille, OLD Section WIE Chair, for her leadership and efforts is organising this event.

I am excited to work with a wonderful team of IEEE volunteers in 2018. This year, the committee members are a mix of senior IEEE volunteers, first time volunteers, young professionals and student members. You can find the complete list of 2018 committee member on the <u>website</u>.

Please feel free to contact me or any of our committee members, if the section could provide any support to your industry or research work.

Newsletter Editor's Report



David Russell davidrussell62@gmail.com

We hope to issue three or four newsletters again this year.

I am looking forward to working with the IEEE Queensland committee and delivering future newsletters.

Newsletters from prior years are available on the Queensland Section's website.

Thank you to all members who have contributed to this addition of the newsletter. Several of our Chapters and Societies have been busy organising events and I expect many of these to be reported in the next newsletter.

The quality of the newsletter is dependent on great contributions. I encourage all Chapters and Societies to continue to send content for the newsletter as it is a wonderful avenue for our members to be aware of future events they might be interested in and catch-up on any events they might have missed.

If you have any comments or changes you would like to see in the newsletter, please let me know. I welcome your feedback.

Membership Development Report



Sudarshan Dahal sudarshan.dahal@ieee.org

As of 24 April 2018, Queensland section has 945 active members. There has been a noticeable decline in membership from 1100 in November 2017. The breakdown of membership count in various grades is shown below.

Section will be sending reminder emails to those in arrears.

IEEE Queensland section has been running various membership drives at various universities and recruiting student members.

1. Griffith University Gold Coast event was organised on 6 March 2018.

- 2. Central Queensland University membership drive was held on 20 March 2018
- Queensland University of Technology membership drive was held on 16 March 2018.
- 4. The University of Queensland membership Drive will be held on 27 April 2018.

Apart from this, IEEE Queensland section is planning to organise membership drive seminars at Powerlink, Telstra and few other industry organizations.

Senior membership drive will start from May where members will be encouraged to apply for senior membership.

Section Name	Sub Section Name	IEEE Current Grade Description	Count of Members*
Queensland Section		Associate Member	8
		Fellow	3
		Graduate Student Member	118
		Life Member	27
		Life Senior	12
		Member	579
		Senior Member	124
		Student Member	74
			945
Queensland Section Total			945

Teacher-In-Service Program (TISP)



Jan McSweeney mcs.jan@gmail.com

Ethics and Integrity: Robots - an exploratory discourse on trust and deception. The QUT School of Law, IEEE Q, Engineering in Medicine and Biology Society (EMBS) and the Society on Social Implications of Technology (SSIT) hosted a distinguished lecture by Regents' Professor Ronald Arkin from the Georgia Institute of Technology who led a presentation on machine deception.



He inverted the trust question to, Can a robot trust you? Once trust is established, only then can deception take place. The term 'deception' is playful, maybe a misnomer, and useful to attract an audience, it has definitely attracted strong negative press coverage. Algorithms are based on human behaviour models, and if for instance, someone important or precious to you provides you with an awful meal, are you going to say that or cushion it in nonoffensive terms. Is that deception? The research focus was on the behaviour of humans and animals & Arkin shared the process modelling of the project and the games theoretical approach, being sets of actions and probabilistic, not deterministic, responses. His end recommendation - don't play 'rock, paper, scissors' with a robot - you will lose.

Aerospace and Electronic Systems Society



Committee:

Chair: Vice Chair: Secretary: Jason Williams Ken Morris Amit Singh

The IEEE Aerospace and Electronic Systems chapter welcomes new members joining from Boeing's Brisbane office. The chapter is looking forward to the upcoming seminar from Dr Joe Fabrizio, IEEE Aerospace and Electronic Systems President and Distinguished Lecturer. The date and location of the seminar will be confirmed in the near future. Another upcoming activity is the International Conference on Radar, being held at the Brisbane Conference and Exhibition Centre 27-30 August 2018. The theme is "new frontiers in radar", and the program includes a range of high quality tutorials, and a special course on Tactical Data Links, presented by experts from Boeing Defence Australia. Details are online at <u>http://radar2018.org/</u>, and early bird registration closes on 30 May 2018.

Welcome to the 2018 International Conference on Radar, the world's premier international conference on radar systems. Radar returns to Australia in 2018 and, for the first time, it will be held in the city of Brisbane. Our tagline this year is 'New Frontiers in Radar'. We aim to five up to this tagline with an exciting array of cutting-edge plenary lectures, tutorials and special sessions. Peer-reviewed oral and poster presentations will take us to the research frontiers. There will be an exhibition featuring latest radar technology as well as opportunities for networking.

Conference managers: Arinex Pty Ltd S3, The Precinct, 12 Browning St, West End, OLD 4101, Australia Tel: +61 7 3226 2800 Website: radar2018 org Email: radar2018@arinex.com.au

INTERNATIONAL CONFERENCE ON RADAR Brisbane Convention & Exhibition Centre 27th – 30th August 2018

NEW FRONTIERS IN RADAR

REGISTRATION NOW OPEN! JOIN RESEARCHERS AND INDUSTRY PROFESSIONALS IN BRISBANE, QUEENSLAND FOR RADAR 2018.

REGISTER NOW! RADAR2018.0RG

KEYNOTE SPEAKER:

DR JAIME LIEN, LEAD RESEARCH ENGINEER, GOOGLE ADVANCED TECHNOLOGIES & PROJECTS

PROGRAM HIGHLIGHTS:

- 8 UNIQUE TUTORIALS ON OFFER
- 'TACTICAL DATA LINKS' SHORT COURSE

KEY DATES:

EARLY BIRD REGISTRATION DEADLINE: 30 MAY 2018

CONFERENCE DATES: 27-30 AUGUST 2018

RADAR2018@ARINEX.COM.AU

🕄 RADAR2018.ORG

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Control Systems/Robotics and Automation Societies



Luis Mejias Alvarez luis.mejias@qut.edu.au

Committee:

Chair: Vice Chair: Secretary:

Luis Mejias Alvarez Navinda Kottege Vacant

Brisbane is hosting the biggest IEEE international robotics conference in the world. Established in 1984 and held annually, the conference is the ideal forum for presentations and discussion on topics related to robotics and automation. The QLD Control Systems and Robotics and Automation joint-chapters are making an important contribution to the success of this conference by being part of the organising committee. Navinda and Luis are chairs for local arrangements and publications. respectively. Part of the responsibilities involve liaising with local organisation and providing local information to attendees, conference proceedings creation for attendees and online publication on IEEE Xplore. In addition, a series of seminars and talks by some of the conference attendees are going to be organised on the dates prior and after the event.

Joins us at the conference and find out about the latest developments in robotics and automation around the world.

Mu Kappa Society

Committee:

Chair:	Wriece Ponmattam Madassery
Vice Chair:	Joshua Riddell
Treasurer:	Lucas Rabenhorst
Secretary:	Samuel Eadie

IEEE HKN Mu Kappa Chapter has organised an induction ceremony for their six newly elected members and their AGM on 15 March 2018. Six new members are inducted through a ritual induction ceremony, which was attended by most IEEE HKN Members of the Chapter along with the Faculty adviser Prof Tapan Saha and IEEE Queensland Section Chair Dr Daniel Eghbal. Newly inducted members were selected based on high calibre academic performance and other excellence criteria. The newly inducted Mu Kappa Chapter Members are-

- Mr. Sameera Samarasinghe
- Mr. Samuel Eadie
- Mr. Ruiyuan Zhang
- Mr. Aobo Zhou
- Ms. Yang Siqi
- Mr. Ebby Thomas



Newly inducted members (From Left: Mr. Ebby Thomas, Ms. Yang Siqi, Mr. Aobo Zhou, Mr. Ruiyuan Zhang, Mr. Samuel Eadie and Mr. Sameera Samarasinghe).



Induction ceremony





Induction ceremony

After the induction ceremony, the Chapter AGM was conducted, where the past office bearers presented their activity reports and an election was conducted by Mr. Lakshitha Naranpanawe as the election commissioner. Our newly elected Committee of the Mu Kappa Chapter for 2018 are as below: 1. President: Mr. Wriece Ponmattam

Madassery

- 2. Vice President: Mr. Joshua Riddell
- 3. Secretary: Mr. Samuel Eadie
- 4. Treasurer: Mr. Lucas Rabenhorst
- 5. Media officer: Mr. Ashley Gillman
- 6. Faculty Advisor: Prof Tapan Saha

(saha@itee.uq.edu.au)

Prof Tapan Saha and Dr Daniel Eghbal spoke on the occasion. Both have agreed to strongly support the Chapter activities during 2018. After the formal part of the function, a BBQ was organised for the Chapter members to celebrate the first year of activities of the Chapter.



AGM. Newly elected board (From left: Mr. Joshua Riddell, Mr. Wriece Ponmattam Madassery, Mr. Lucas Rabenhorst, Mr. Ashley Gillman, Mr. Samuel Eadie, Prof Tapan Saha).



2018 Mu Kappa Chapter members with IEEE Queensland Section Chair Dr Daniel Eghbal

Power and Energy & Dielectric and Electrical Insulation Societies



Tapan Saha saha@itee.uq.edu.au

Committee:

Chair:	Tapan Saha
Vice Chair:	Nilesh Modi
Secretary:	Mohammadhossein Etesami
Treasurer:	David Batterham

IEEE PES-DEIS Joint Chapter of Queensland has a new leadership team for this year. The team will be Prof Tapan Saha from UQ, Dr Nilesh Modi from AEMO, Mr David Batterham from the local consulting industry and Hossein Etesami from Griffith. We have a full list of activities planned for 2018. We are updating our members with a number of current programmes and call for Scholarships.

First Event: A day in the life of a Power System Controller

Speaker: Monique Meerkotter, AEMO

- Date: **17 April 2018**
- Time: **11:00 AM to 12:00 PM** The University of Queensland, St Lucia, Queensland Building: Advanced Engineering Building 49, Room Number: 502



The Australian Energy Market Operator (AEMO) is responsible for operating

Australia's largest gas and electricity markets and power systems, including the National Electricity Market (NEM), the interconnected power system in Australia's eastern and south eastern seaboard, Wholesale Electricity Market (WEM) and power system in Western Australia.

One of the roles of AEMO's Real Time Operations team is to oversee operation and security of the National Electricity Market and Real Time Operations of the NEM. This talk covered an overview of NEM, experience of operating one of the largest interconnected grid and challenges faced while operating the NEM.

Biography: Monique Meerkotter works as part of a team of 2-3 power system operators on shift at any point in time at AEMO's Brisbane control room. Working on the front line of the electricity industry, Monique has firsthand experience operating the power system for different generation mixes, outages and weather conditions. Monique completed the AEMO Graduate Program and & holds а BA Electrical Electronic Engineering/BA Computer Science (JCU), Grad Dip Ed (Maths & Physics) (OUT) and two years of industry research on integrating solar PV into the power system. In her time outside of work, she enjoys reading about energy policy, cycling, salsa dancing and art.



Monique Meerkotter & Marcus Jiang from AEMO with PES-DEIS Chapter Chair Tapan Saha



Thirty-five members and non-members of IEEE PES attended the event. Several questions were asked by the audience. There was a lively discussion on the topic. Marcus Jiang from AEMO explained AEMO 2019 Graduate program to the audience. There was a lot of interest from the Students and Graduate members of IEEE PES Chapter. Discussion continued even after the event was concluded. Tapan Saha concluded the event with thanks to both Monique and Marcus for their presentations.

Second event: Renewable Electricity Sources.

Speakers: from industry and academia.

Date: 23 May 2018 - 01:00 pm to 05:00 pm (Registration from12:30 pm)

Venue: Engineers Australia Hawken Auditorium (Level 1, 447 Upper Edward Street, Brisbane City)

This is a Co-Bag event between EA Electrical Branch, EESA, IET and IEEE.

Australia has one of the highest proportions

of household solar PV in the world with South Australia and Queensland leading the way. Large-scale solar is booming and about 2.6 GW of capacity is expected to be accredited under the Renewable Energy Target this year.

The Tesla 'big battery' in South Australia has received national headlines and proved to effectively support the grid when other power plants trip. Australia's first battery storage manufacturing plant has been announced in Adelaide and the residential storage market is expected to increase significantly this year.

The increasing uptake of renewable energy and storage is challenging engineers working on transmission and distribution networks. This event will discuss renewables such as Solar and Wind Generation and to connect and manage large amounts of power, both in urban and regional areas. Speakers will be from industry and academia, which will be finalised soon.

You can register through this link:

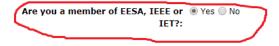
https://www.engineersaustralia.org.au/Even t/renewable-electricity-sources

This event is free for IEEE Members. During the registration process you need to make sure you click on yes in the section circled in red to get the discount and have event (as shown below).

Registrant Details



CC Email Address:



IEEE PES Travel award for Students to attend PES GM 2018

IEEE Queensland Section PES/DEIS joint Chapter now accepts applications for 2018 IEEE Power & Energy Society (PES) Queensland Chapter Conference Travel Prize for attending IEEE PES GM 2018 in Portland, Oregon, USA, which will be held during Sunday, August 05, 2018 to Thursday, August 09, 2018. If you are eligible, please submit your application on or before 1st May, 5 PM Brisbane time 2018 as per the process described below. This year we are offering maximum two scholarships each worth up to \$ 2000 (Total scholarship money will be \$4000). If necessary, please contact me for further information.

Regards,

Prof Tapan K Saha Chair, PES/DEIS Joint Chapter IEEE Queensland section E: <u>saha@itee.uq.edu.au</u>

1. Prize Description

(a) Special certificate endorsed by the chairperson of the IEEE Queensland Section PES Chapter (b) Cheque up to \$2000.00

- (c) A ticket to attend the IEEE Queensland section AGM Dinner
- 2. Eligibility Criteria

Candidates must hold a current IEEE PES membership (graduate student member or full member).

Full time candidature in a research higher degree (Masters by research or PhD) at one of the universities in Queensland Section or a full time employee of an industry located in Queensland who has completed his/her latest full time graduate degree in last 5 years and under the age of 35 years on 10 April 2018.

Candidates must have an accepted full paper for the IEEE PES General Meeting of the current year of the prize, where the candidate must be the first named author of the paper.

The paper must be adjudged to be in the field of Power Engineering.

3. The process of submissions: Full-time students submit the accepted full paper to the PES Chapter Chair with peer review reports and with a recommendation from their academic adviser by 1 May 2018. The recommendation should address following issues:-

(i) Full-time candidature in a research higher degree

(ii) Quality of the work (novelty)

(iii) Assurance that the student adviser/ student will pay the balance of the cost to attend the conference.

Industry employee submits the accepted full paper to the PES Chapter Chair with peer review reports along with a cover letter by 1 May 2018. The cover letter should address following issues:

(i) Proof that the industry employee is a graduate in last 5 years and a full-time employee of an industry located in Queensland Section and maximum 35 years of age by 10th April 2018.(ii) Quality of the work (novelty)

(iii) Assurance that the industry employee will pay the balance of the cost to attend the conference.

4. Candidate Nominations:

Nominations for the above prize will be accepted from:

- A. Research higher degree students from the following universities:
- (a) Central Queensland University
- (b) Griffith University
- (c) Queensland University of Technology,
- (d) The University of Queensland
- (e) University of Southern Queensland

B. A graduate in last 5 years and a full-time employee of an industry located in Queensland Section (maximum 35 years of age)

5. Selection Process

A committee of IEEE PES officers and a representative from IEEE Queensland section will be formed. Chair of the committee will be the Chair of the IEEE PES Queensland Chapter. The prize winner will be selected by the prize committee comprising:

- (a) Chair of the IEEE Queensland Section PES Chapter
- (b) Secretary of the IEEE Queensland Section PES Chapter
- (c) Vice Chair of the IEEE Queensland Section PES Chapter
- (d) IEEE Queensland section representative decided by the section committee.

In case of any vacancy in these positions, IEEE QLD Section Chair will nominate a suitable replacement.

6. Prize Information Prize winner will be notified by 15th May 2018. A certificate will be awarded during the AGM and cheque will be provided immediately after the announcement. The winner should submit a one-page report to the PES chapter Chair before the AGM about his/her experience by attending the conference. Information about the prize will be distributed by means of any or all of the following

(i) IEEE newsletter

(ii) IEEE University Student Branch Counsellors

(iii) IEEE Queensland Section PES Chapter web page.

7. Selection criteria IEEE Power & Energy Society (PES) Queensland Chapter Student Conference Travel Prize:

There are five criteria for marking papers: The novelty of the paper (technical) Peer review report Advisers report Theoretical Value Paper Presentation

University of Queensland, PE31 Queensland Section Chapter, PE31/DEI32 : <u>http://ieee-qld.org/chapters/power-and-energydielectrics-and-electrical-insulation-societies/</u>

Signal Processing/Communications Societies



Greg Hislop n.hussain@qut.edu.au

Committee:

Chair:	Greg Hislop
Vice Chair:	Muhammmad Mohtasim
Secretary:	Vacant

То date the Signal Processing and Communications Joint chapter has held three events this year. Our focus has been on organizing monthly journal club meetings. Prior to these meetings a volunteer proposes top citing or otherwise extremely а interesting/topical journal paper (not one of their own!). Interested people then read the paper and on the first Tuesday of each month we meet at a Brisbane venue (chosen by the presenter). The presenter gives a technical overview on the paper and opens conversation there on. All of this happens in a social setting over drinks or a meal. Each event currently attracts around a dozen participants on a monthly basis. Regular attendees include representatives from around half a dozen Brisbane based companies as well as government employees such as from the CSIRO and DST. Lastly we also have significant involvement from university Professors and Lecturers out of QUT and UQ. It is as such a good networking opportunity in a combined intellectual/social atmosphere.

Recent paper topics have included the original block chain white paper and compressed sensing applied to MRI. Our next event is Tuesday 1 May at the Brisbane

German Club at 6pm where renowned Prof Vaughan Clarkson will present a paper on radar array signal processing

T. L. Song and D. Musicki, "Target existencebased resource allocation," IEEE Trans. Signal Process., vol. 58, pp. 4496–4506, Sept. 2010

A full description of the event may be found at the IEEE vtools site below, indeed all our events are advertised on this site and visible usually at least a week in advance

https://events.vtools.ieee.org/m/171950

Our meeting for the following month of June i.e. Tuesday 5 June is currently being organized and will tentatively involve a paper on the great Australian scientific development that is the SKA Pathfinder telescope with D.R.DeBoer and 18 other authors, "Australian SKA pathfinder: A highdynamic range wide-field of view survey telescope," Proc. IEEE, vol. 97, no. 8, pp. 1507–1521, Aug. 2009.

Our meetings are open to all comers and I encourage you to participate.

Women in Engineering



Marie-Luise Wille m.wille@gut.edu.au

Committee: Chair: Vice Chair: Secretary: Treasurer:

Marie-Luise Wille Negareh Ghasemi Hanxiao Zhang Vacant



IEEE WIE International Leadership Summit (ILS) is coming to Australia in 2018!

This is part of IEEE WIE's global initiatives that focus on Inspiration, Leadership, Empowerment and Entrepreneurship mid to senior women in technology. Please join us!

If you would like to be a sponsor, speaker, or support the local organising team, please contact us using the online form: <u>http://sites.ieee.org/wieils-aus-</u> <u>2018/contact/</u>

For you, this summit will provide opportunities for networking, mentorship, and collaboration. The summit will bring to you two days of fantastic workshops, seminars and fun!

Event details:

- Date: 26-27 Nov 2018
- Host City: Brisbane
- Brisbane Convention Centre
- <u>http://sites.ieee.org/wieils-aus-2018/</u>



IEEE

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IEEE WIE INTERNATIONAL

LEADERSHIP SUMMIT

Young Professionals



Rob Makaremi rob.makaremi@suncorp.com.au

Committee:

Chair: Vice Chair: Secretary: Rob Makaremi Nazanin Nadian Rueben Peterkin

Greetings and welcome to 2018 from Young Professionals Queensland Section. In 2018, we plan to maintain last year's momentum and organise multiple seminars and events to empower the new generation of engineers.

This year, we have a new committee member. Nazanin Nadian who previously served in the Power and Energy Society has joined us in YP as our new Vice Chair.

Throughout 2018, we will focus on various topics that can enable engineering students and graduates to upskill and evolve into

professional engineers. For technical seminars, we will be focusing on topics such as power and renewable energies, fintech, machine learning, and dev-ops. For our nontechnical events, we plan to cover topics including soft skills, professional networking, and personal branding. In addition, we will have seminars about professionals with background in electrical engineering who utilise their engineering knowledge and skill set in other areas and have chosen nonengineering careers.

To get the latest updates on our upcoming events follow us on <u>Facebook</u>.

Griffith Gold Coast Student Report



Ben john ben.john@griffithuni.edu.au

Committee: Chair: Vice Chair: Secretary: Treasurer:

Ben John Carl Kleinschmidt Jade Newing Elise Jenkins

The student branch has already run a successful membership drive, recruiting 14 new members to the branch as well as retaining another 18. Future plans for the branch include, hosting a LaTeX workshop for students to develop their programming and reporting skills to produce higher assignments quality and thesis. Furthermore, the branch plans on a Powerlink site visit to a local substation. Finally, the chapter has been collaborating with the on-campus WiE group to arrange the annual networking night.

The planned networking night will be held at the Griffith University 'uni-bar' function room, on the 5 June with a 6:30pm arrival, for a 7pm sharp start. The event invites industry professionals to come and enjoy a drink and mingle with aspiring engineers. Registration for the event is available through vtools as well as at the link provided. Link for registration: https://goo.gl/Pz4yyw

The Powerlink tour of a local substation is presently planned for August and will be led by several substation engineers. This provides students with an exciting opportunity to examine the real-world application of their studies in the power industry. The IEEE Student Branch for Griffith University has accepted the exciting opportunity to design and develop an electric vehicle to submit to the Formula SFAE-A Competition in 2019. The Formula SAE competition has been entered by over 500 universities, with their vehicles competing in acceleration, efficiency, and endurance challenges, showcasing their students' abilities, in both the engineering electric vehicles and project of management. Through the diverse range of electronic, mechatronic and electrical expertise of the IEEE student members, the vehicle's components, such as the accumulator, battery management system, and motor control systems, will be professionally researched and manufactured within a two-year period. IEEE student members have been presented with the opportunity to acquire real-world engineering and manufacturing experience; a highly distinguishable attribute when compared to peer graduates.

Griffith University IEEE team firmly believe that this is an exciting prospect and, with the support of Griffith academics of Dr. Jun Wei Lu, and PhD candidate, Mr. Domagoj Leskarac, will be a brilliant opportunity for our members. Further support has been provided by Mr Leskarac's team at the Griffith Nathan campus, who have subsequently offered their advice, results and research developed through the establishment of their own electric motor control techniques for an electric motorcycle powertrain.

The project is currently residing in its development phase and sponsors are highly

sought after. Please direct enquiries regarding the project, or at various events hosted throughout the coming year to the project manager, and branch treasurer, Jade Newing, directly, at Jade.newing@griffithuni.edu.au.



Nima Khoshsirat khoshsirat@ieee.org

Committee: Chair: Vice Chair: Secretary: Treasurer:

Nima Khoshsirat Mohsen Khorasany Mac Akmal Jahan Chandrama Sarker

Follow us on



IEEE QUT student Branch activities

- New executive committee members 1have been elected and introduced to the Queensland section in March 2018. The new committee had their first meeting in the last week of March to discuss their 2018 plan. Accordingly, it has been decided to organize one non-technical and at least three technical talks in June through September timeframe. Negotiations with speakers and finalizing the date and time for each of these events is in progress. Updates will be announced through V-Tools.
- 2- "IEEE membership drive" was organized by the QUT student branch and Queensland section membership development officer. Dr Sudrashan Dahal gave a presentation about the IEEE membership, its benefits and

opportunities. Mr Nima Khoshsirat, chairman of the QUT student branch also gave a report about QUT student branch activities in last year and their plan for this year. The goal of this event was to increase awareness about IEEE activities and membership benefits among students and to increase student membership.



UQ and UQ PES Student Report



Ebby Thomas (UQ PES Chair) e.thomas@uq.edu.au

UQ Student Committee:

Chair: Vice Chair: Secretary: Treasurer:

Blake Alexander Sean Lin Vishy Datla Vacant

The visions of the IEEE and PES are,

- Advancing global participation;
- Educating the Future Workforce;
- Industry Activity Trends;
- Standards Leadership;
- Participating in Regulatory Initiatives;

The Elected Committee:

There was a meeting held on the 10 April to elect the panel members to form the new committee. As per that, the following active members of IEEE were elected based on the nominations that were received.

Chair:	Mr. Blake Alexander
Vice Chair:	Mr. Sean Lin
Secretary:	Mr. Vishy Datla

The elected IEEE PES chair is Mr. Ebby Thomas

We thank our Advisors, IEEE UQ Student Branch Counsellor: Dr. Chandima Ekanayake

IEEE UQ PES Student Chapter Counsellor: Prof. Tapan Saha

Activities Planned:

During the initial following meetings, we came to one single point of nurturing the basic idea about IEEE with all the graduates.

Some of the points highlighted were the three "R"s,

• **Relate** with the students to identify their issues and challenges

• **Report** the issues/challenges faced by the students

UQ PES Student Committee:

Chair: Ebby Thomas Secretary: Vacant

• Recover the student's issues through remedial measures suggested from the IEEE section

Below reported is some of the completed as well as scheduled activities of the IEEE branch and the IEEE PES student Chapter.

Activities Conducted:

Activity #1

Host: UQ IEEE PES Student Chapter Event: IEEE PES Day Date: 20 April 2018 Type: Social event/gathering Purpose : Commemorate IEEE PES Day

Background:

22 April 2018 commemorates the 10th anniversary of the change of the society to Power and Energy Society (PES), and so will be celebrated as the International PES day, worldwide for the first time ever...!

The theme of the PES day will be "more power to the future", and the logo for the specific occasion is as shown below. In the logo, the tower stands for the number 1 and the globe stands for number 0, so that they together represent the number 10 to indicate the past 10 years.



The event was successfully held in the Axon building of UQ, St.Lucia. Though it seemed to be affected by the adverse climate, the active members of IEEE PES gathered together for discussing a new start. There was also a brainstorming session where many innovative ideas came up about the future activities of IEEE PES. Some of them are,

• Discussion/presentation/talk about the life in academia

• How could the IEEE PES make use of its high-skilled human resources, for activities such as Student Revision session. Following up this idea, the current chair of IEEE PES agreed to contact the UQ-EBESS (Electrically Based Engineering Students Association) and SWOT tutoring that operates in the University.

• We also intend to organise a career preparatory seminar by some fresh graduates who were successfully placed.

• A site visit to improve the technical knowledge of the members and to have a first-hand knowledge about real world problems.

• A workshop on "Energy Audit", as sustainability is increasingly getting discussed these days.

• A workshop about the importance/significance of IEEE in Student life, along with the importance of "Volunteering *in IEEE"*



Hosts:	IEEE PES Branch, with the active
	participation UQ IEEE Student
	Chapter
Event:	A day in the life of a controller
Date:	17 April 2018
Type:	Technical Event

Purpose:

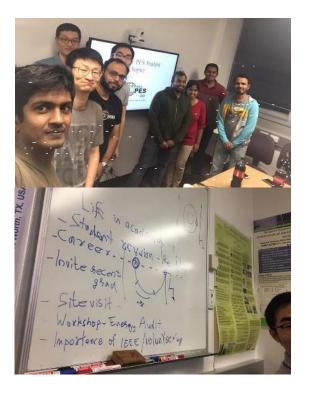
To deliver the members of PES and PES Student members an idea about the life of a controller engineer. The speaker was Mrs.Monique Meerkotter, from AEMO controller room.

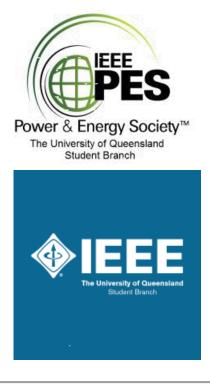
The event was successfully held in the Advanced Engineering Building of UQ, St.Lucia. It was a very informative session and was attended by numerous guests including PES members.

Activity #3

Hosts:	UQ IEEE PES Student Chapter, UQ
	IEEE Student Branch
Event:	IEEE-PES Membership drive
Date:	27 April 2018
Type:	IEEE-PES Membership event and
-	kick-off.

Purpose: Membership drive and advertising IEEE and PES amongst future members.





Background:

Every year, the PES conducts membership drives to reach the students who later join the group after realising the benefit as a PES member. This year, the PES collaborates with the IEEE UQ Student branch to conduct a kick-off event as well as the membership drive. Contrary to previous years, this year, we have hosted an event to attract a greater audience. We hosted a workshop together with guest speakers that ends with social networking.

About the Workshop: The workshop aimed to provide the students a practical Matlab workshop by an industry/academia expert so that the students would be more inclined to IEEE and PES in their future events. The workshop also had problem solving sessions where the attendees could win a prize from the IEEE.

About the speakers: Jarek Krata, who is nearing completion of his PhD from the Power and Energy Society, UQ was the key speaker. He delivered the workshop interactively, which was accepted with good response. Also, Prof.Tapan Saha as well as Dr.Sudarshan Dahal addressed the attendees about the significance of IEEE, PES as well as the volunteering opportunities and avenues for career development whilst working close with IEEE.

About the social networking: The social networking allows the attendees to freely interact with the presenters as well as IEEE delegates to clarify their doubts regarding the IEEE, PES and the benefits of working with them.

Membership drive: There were 6 new member additions to the IEEE. All these six new members were also interested in joining the PES as well.





Activity #4

- Hosts: IEEE PES, UQ IEEE PES Student Chapter
- Event: Personal Professional Development Programme
- Date: TBA (Late May or Early June)
- Type: Personal Professional Development Program – Selection criteria for a Job
- Purpose: Professional development of its members, to create awareness about the selection criteria for jobs.

Background:

Job hunting is critical in every graduate's life. The purpose of this event is to sooth the process of graduate job hunting by providing them with the information about the skills that the companies would expect from a graduate.

About the Workshop: More details TBA

About the speakers: TBA