

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

# IEEE Queensland Section Newsletter

### April 2016

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## Section Chair's report



GARRY EINICKE Garry.einicke@csiro.au

Welcome to IEEE Queensland's first Newsletter for 2016.

Engineers must collaborate. There is simply too much out there for us to assimilate individually. Plus, we dont want to waste our precious resources rediscovering what is already known. Next to Google, the IEEE Xplore digital library is one of the most practical ways of canvassing existing solutions to problems. <u>ResearchGate</u> and <u>Academia</u> are open access sites for accessing research.

The IEEE has recently developed Collabratec - an integrated online community where technology professionals can network, collaborate, and create – all in one central hub (see <u>Collabratec</u>. This is an online community which offers a suite of productivity tools and is available free to technology professionals around the world with exclusive features for IEEE members.

Sometimes on-line experiences may be too dry. Often it is better to quiz practitioners face-to-face about the state-of-the-art. The IEEE excels at providing face-toface collaboration opportunities. We routinely organise visiting lecturers, workshops and conferences. For example, this year:

- Tapan Saha and his team are organising the 2016 Australasian Universities Power Engineering Conference (AUPEC) to be held during Sep-2016, in Brisbane;
- Robert Kennedy and Vaughan Clarkson are bidding to host the RADAR 2018 Conference in Brisbane; and
- Peter Corke and his team are organising the 2018 IEEE International Conference on Robotics and Automation (ICRA).

Our WebMaster, Mike Robinson, has recently remapped and updated our web sites to mobile-friendly forms (see <u>http://ieee-qld.org/</u>). The home page possesses links to our Queensland Chapters, the Australia Council and other Australian Sections to aid our collaborations.

As usual, feel free contact a member of our team if we can support your engineering and research in some way.

## Section Vice-Chair's Report



DR. DANIEL (MEHDI) EGHBAL m.eghbal@uq.edu.au

2016 IEEE Region 10 annual meeting (also known as section chair's meeting) was held in Bangkok, Thailand on 4-6 March 2016. R10 executive committee and R10 section chairs meet once a year. These meetings provide a great opportunity for all section leaders within Region 10 to share experiences, ideas and discuss their challenges face-face.

It was my second time attending the R10 meeting to represent the Queensland Section. From Queensland, Prof. Tapan Saha and Associate Prof. Vaughan Clarkson also attended the meeting as Australia Council Chair and 2017 IEEE Section Congress Chair, respectively.

I met many section chairs and some IEEE headquarters senior leaders including the IEEE president, the candidates for IEEE president elect and the director of the IEEE Collabratec project.

As part of this meeting, I also attended the Australia Council meeting. The Australia Council meeting was an opportunity to meet other Australian Section chairs and discuss Australia wide activities such as the student paper competition, distinguished lecture program, and reviewing Australian Council bylaws.

The meeting included many presentations over two days from 8am-6pm. On day 1, winners of the R10 outstanding section awards shared their experience. I can share with you that Queensland section is on the right track to be a possible winner. However, we need to plan and work more proactively in some areas including educational activities, professional activities, membership development and student activities.

I picked up some good ideas from the presentations and talking to other IEEE section leaders that we could implement in our section. A copy of all <u>presentation slides</u> and <u>official photos</u> can be downloaded from Region 10 website.

I encourage you to review the presentation slides relevant to your chapter/ affinity group.

I am pleased to share with you that Queensland section is one of the active and well-organised sections in Region 10. However, there are few areas that we can perform better and provide more services to our members.

Below are the main points that I'd like to share with you:

- There has been a slight decline in the number of IEEE members worldwide in 2016. Region 10 is still the largest region in the IEEE and is growing (mostly in China and India). Providing more benefits to IEEE members at different levels is very vital and is one of the main focuses of the current Region 10 executive committee. We should inform members of the benefits of IEEE membership while increasing the benefits and endeavouring to tailor them to our members in Queensland.
- To support Young Professionals and Women in Engineering Affinity Groups, Region 10 will continue to provide financial support for proposals targeting these affinity groups. I request our affinity group chairs to submit proposals to R10 when the call for proposals opens soon.
- Student members are the future leaders of our society. Recruiting new student members and retaining student members are very important. Region 10 encourages all sections to promote student activities and provides financial support.

- In 2016, IEEE Region 10 celebrates its 50 year anniversary. This is a great milestone for Region 10 and us. Currently, we are at the very early stages of planning some events and will update the section shortly.
- IEEE launched an integrated on-line community called Collabratec in 2015. I am excited to share with you that Queensland and Victoria sections are the most active sections in R10. Thank you to those of you who have already joined and I encourage you to join and explore the new features that very recently have been added (see <u>Collabratec</u>). I am the Collabratec moderator

and please contact me if you had any questions.

• IEEE Awards and Recognition program is designed to recognise the valuable service that IEEE volunteers provide to the community in different capacities and categories. Queensland section encourages you to nominate IEEE volunteers who you believe have made an outstanding contribution to our community. Two of the R10 outstanding volunteer awards were presented to volunteers from Australia.

#### **Daniel Eghbal**

IEEE Queensland Section Vice-Chair 2016



Australia Council group photo with R10 Region Director and IEEE President



### Treasurer's Report



MIKE ROBINSON blackmagic@computer.org

In my annual report for 2015, I called for more financial oversight on the part of the executive committee. Leaving the section's finances to good fortune is not an intelligent way to proceed.

On the face of it, the section had a relatively good year in 2015. Deeper analysis shows that spending requires greater control, despite record inflows of revenue. Some measures have since been taken to control spending, but the section is still a long way from being a fiscally prudent organisation.

The section's principal source of income is normally tied to IEEE rebates, of which there are two types.

- The first type is a capitation rebate based on membership levels and performance criteria that include minimum activity levels for chapters, and a 10% bonus for finalising end-of-year reporting by a deadline date. The capitation rebate has been growing as the section's membership grows, and in the 2015 financial year it amounted to US\$8,754.60, or AUD\$11,775.
- The second type of IEEE rebate is less predictable. It involves performance rebates for individual chapters that stand out from their peers at region and international level. There are only two chapters in the section that currently fall into this category, and each year they vie for bonus rebates with the best performing chapters in the world.

The section benefitted from \$2,701.91 in additional performance rebates in 2015, bringing the total rebates to \$14,476.97. That should be the maximum sum the section can spend in 2015, but as we shall presently see it spent somewhat more than its income.

Total cash outflow for the 12 months ending 30th November 2015 was a whopping \$29,661.37. In February 2015 the section celebrated its 30th anniversary, and the cost of staging the event was \$12,452.45. This cost was underwritten by sponsorship and event fees, so it can be removed from the total annual spend, reducing it to \$17,208.92, but still way above the section's nominal income of \$14,476.97.

What was the \$17,208.92 spent on? Here is a breakdown:

- Administration costs \$1,972.23
- Chapter assistance \$6,143.29
- Student prizes and chapter assistance \$5,568.45
- Professional development \$127.78
- EA Fraternity Dinner \$650.00
- 2014 AGM Dinner \$2,747.14.

The annual dinner always generates a loss, and the loss eats into the IEEE rebates. The cost of the 2015 dinner was \$2,925.70, but the amount collected in dinner fees was only \$1,440.00, meaning a loss of \$1,485.70, which will appear in the 2016 annual accounts.

Two other important events occurred during 2015 that helped strengthen the section's overall financial position. The first was the receipt of \$19,023.79 from two international conferences for which the section provided professional services. The second was moving \$30,000 into term deposits, bringing the section's cash reserves past the \$100,000 mark for the first time.

The overall effect of these two transactions reduced the section's bank balance from \$21,514 at the start of

the financial year to \$13,533 at the end of the year, a notional loss of almost \$8,000.

I hope the financial information I have presented thus far helps section members understand why the section's finances must be brought under tighter control. The section chair recently announced reduced spending limits on catering at chapter events, but this in itself won't solve the overall problem. It would be possible for two very active chapters to stay within the spending limits and still spend most of the revenue that comes in through IEEE rebates.

Let me illustrate this point. If 20 chapter events were held each year by the two most active chapters, that alone would generate over \$2,000 in catering costs. If 8 of those events involved Distinguished Lecturers the cost could increase by another \$5,000. Take \$7,000 from \$14,000 and there isn't much left to fund other activities such as student prizes and membership drives, not to mention the catering costs generated by the 8 less-active chapters.

Two possibilities arise in such a scenario. One is allocating scarce section financial resources by setting annual spending budgets. The other is seeking to raise revenue from chapter activities. I hope the executive committee will consider these options closely before the section is forced to break into its reserves to fund out-of-control spending.

### Newsletter Editor's Report



DAVID RUSSELL davidrussell62@gmail.com

It is wonderful to join the IEEE Queensland Committee as Newsletter Editor.

We hope to issue three or four newsletters this year.

Thank you to all members who have contributed to this issue of the newsletter. This is the first newsletter I have produced for IEEE and it has been a steep learning curve. For those of you who don't know, the newsletter has traditionally been produced using IAT<sub>E</sub>X. It took me a while to come up to speed with IAT<sub>E</sub>X, but hopefully I have mastered the basics and the format of the newsletter is acceptable. Regardless of the tool we use to produce the newsletter, the quality of the newsletter is dependent on "great" contributions rather than the formatting tools. Please keep sending those contributions through so we can keep our IEEE members informed on the activities and benefits offered by being a member.

Garry Einicke (Queensland Chair) in his section of the newsletter has emphasized many of the recent advances IEEE has undertaken. Daniel Eghbal (Vice Chair) in his section of the newsletter has reported on the positive developments he observed when attending the Region 10 annual meeting. You will see throughout the newsletter our section chairs have highlighted many of the benefits of IEEE membership. There are some tremendous local events which have already taken place this year and there are many more to come. If you have friends or colleagues interested in participating in these activities please show them the newsletter and encourage them to join IEEE.

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

Newsletters from prior years are stored in the section's website <u>archives</u> and are accessible to all members.

Mike Robinson has written some <u>guidelines</u> to follow when making submissions to the newsletter which appear on the section's website. If you can follow this handy set of notes it will certainly make my job easier and I would appreciate your support.

I am looking forward to my year on the IEEE Queensland committee and delivering the newsletters.

## Webmaster's Report



MIKE ROBINSON blackmagic@computer.org

I attended a student recruitment drive at Central Queensland University's Brisbane campus recently and gave a short, impromptu talk about the benefits of becoming a member of the IEEE.

The room in which the event took place had a computer connected to a large video display. I asked Sangeetha Kutty, the CQU Student Counsellor, to connect the computer to the Queensland section website so I could illustrate a few points that I intended to cover in my talk.

To my great surprise, even though I designed and populated the website, I found it was an ideal visual prompt for the information I wished to impart to the prospective student members. Using the small black navigation bar at the top of the website I was able to show the students the wide range of support services offered by the IEEE.

The Chapters drop-down menu on the website was an ideal way to illustrate the range of activities covered by the sections members. The Students drop-down menu allowed me to demonstrate that student activities are a core part of the section's makeup, and to discuss student awards and prizes that are offered annually.

Finally I switched to the Australia Council website and showed the students the chapter matrix that integrates all the Australian sections into a network involving 31 different IEEE societies.

I strongly recommend that student counsellors involved in student membership drives use the section website as a recruitment tool. All of the CQU students present at the event signed up enthusiastically.

The new Queensland section website is gradually

nearing completion. None of the menu items link back to the old website as they did previously. Several new items have been added to the menus; these are mainly resources that can be downloaded as needed. They include IEEE guides for the various leadership positions within the section, and a student membership application form.

The only information that remains to be transferred from the old website is chapter history items. I expect to be completely finished in time for the next newsletter.

Presently, the section website consists of around 120 individual web pages. The final number of pages will be close to 200.

How does the Queensland section website compare with other sections' websites? On any measure it is streets ahead. Only Victoria and Northern Australia have mobile-friendly websites. Until a week ago none of the other section websites displayed photos of section officers; now Victoria is following a practice established by Queensland several years ago.

None of the other section websites have individual web pages for their chapters or student members. None of them have photo galleries where section events are chronicled. Few of them provide contact details for their officers. Most of them have not had a style refresh for years, and some of them have pages that contain outdated information.

In summary, the Queensland section website is leading the pack at the moment. Congratulations and thanks to all who have helped me get the website into this position.

### Educational Activities Chair's Report



**PROFESSOR KALUM UDAGEPOLA** kalumu@srdita.com.au

This year I am expecting to organise at least two educational activities across Queensland. These events will be organised with the support of other IEEE sections.

Our first event is called "Developing Data Mining and Visualization Techniques for the Integrated Analysis of Complex, Spatially-located Data Sets for Both Exploration and Mining Purposes" and will be held on 21st March 2016 at University of Queensland. The event will be organised with the support of Professor Tapan Saha and Ms. Hanxiao Zhang, Student Chair - IEEE Power and Energy Society University of Queensland Branch. We are expecting approximately 60 participants and targeting BSc, MSc, PhD students and researchers who are interested to expand their knowledge.

Our guest speakers are Stephen Fraser, Senior Principal Research Scientist at CSIRO and Andrew Olsson, Senior Research Engineer CSIRO. They will deliver presentations on "Knowledge from Data Using Self Organizing Maps" and "Drilling / Automation / Monitoring and Associated Technologies". This will be an inspirational session as these two very experienced leaders in their fields share their knowledge with participants.

Our second event will be announced soon. If you have any ideas for topics that would be of interest to our membership, please send them to me.

## Aerospace and Electronic Systems Society



**ROBERT KENNEDY** Robert.Kennedy@ausaero.com.au

#### **Committee:**

Chair: Robert Kennedy, Boeing Defence Australia Vice-Chair: Ken Morris, Air Services Australia

This year we are organising a lecture and a 1 day workshop with a possible international distinguished lecturer later in the year.

#### May 2016 (date to be confirmed)

A lecture based around GLS (GPS based ILS, or Global Positioning System based Instrument Landing System), installed in Sydney. The lecture will be presented by Gordon Young from Air Services Australia.

ILS systems have been around for a long time, with basic ILS from World War II. ILS unfortunately does not allow for multiple approaches and requires an ILS kit (glide path and localiser) at every runway end. GLS solves this matter.

#### Mid July 2016 (date to be confirmed)

1 Day workshop on HF Over the Horizon Radar by Dr Joe Fabrizio of DSTO.

The workshop will introduce the fundamentals of OTHR design and operation. This includes HF passive radar, multipath driven geolocation, adaptive processing techniques and signal separation. Dr Fabrizio is a Distinguished Lecturer for the AESS.

#### Radar 2018

We are currently organising the AES Radar Conference that is coming back to Australia in 2018. The conference will host a number of delegates from industry and universities all over the world.

Please keep an eye out for emails and check our <u>website</u> for any updates and vTools for meetings.

## **Computational Intelligence Society**



AMIN GHARIPOUR a.gharipour@griffith.edu.au

#### **Committee:**

Chair: Amin Gharipour, Griffith University Vice-chair: Andrew Lewis, Griffith University Secretary: Zahra Jadidi, Griffith University Treasurer: Alan Liew, Griffith University

Computational Intelligence Society Chapter in 2016 has organized the following seminars: **DICTA 2016 Conference (date to be confirmed)** 

Computational Intelligence Society Chapter will provide technical sponsorship of DICTA 2016 conference that will be held at the Gold Coast. May 2016 (date to be confirmed)

Title: "Big Data Fusion for Mining e-Health Data" March 2016

Title: "Social Media & Social Network Data Analytics"

Speaker: A/Prof Xue Li, DKE Division, School of Information Technology and Electrical Engineering, The University of Queensland

Abstract: Social media and networks are a popular place for people to express their opinions about consumer products, to organize or initiate social events, or to spread news. Some questions would be asked in order to understand the social media and social networks:

- How can we detect and predict the emerging sensitive events?
- How can we predict the propagation patterns of on-line micro-blogs?
- How can we understand people's opinions about a current issue, a new product, or an important event?

This talk is to report on our recent research work on the social media and social networks data mining. A few application systems will be reported to answer the above questions.

#### February 2016

Title: "Big Data Analytics"

Speaker: A/Prof Xue Li, DKE Division, School of Information Technology and Electrical Engineering, The University of Queensland

Abstract: A stunning story on a successful prediction of 2012 USA Presidential Election with 100% accuracy by Mr Nate Silver has shown that the challenges are not just to invent new algorithms to deal with large, noisy, and uncertain data, but to link the multiple relevant data sources, structured or unstructured, together to make effective recommendations. Information is now available everywhere from the Web, sensor networks, social networks, or the proprietary databases. Consequently, making effective and efficient recommendations based on Big Data is becoming a significant and urgent challenge because of complex, fast changing relationships between data objects. Therefore, the question is: how can we make effective recommendations based on the relevant information collected from high-speed, time-variant, high-dimensional, and distributed data sources in the current changing and interconnected world?

This talk will introduce current research activities in the big data analytics and the research group led by Dr Xue Li and provide insight into the issues in the current research.

## Control Systems/Robotics and Automation Societies



DR. LUIS MEJIAS luis.mejias@qut.edu.au

#### **Committee:**

Chair: Dr. Luis Mejias (Queensland University of Technology) Vice-chair: Navinda Kottege (CSIRO)

The IEEE QLD chapter on Control Systems/Robotics and Automation (CS/RAS), the IEEE Society on Social Implications of Technology (SSIT) and the Robotics and Autonomous Systems discipline at QUT co-hosted a Distinguished Lecture by Prof. Ronald C. Arkin. The lecture was held on Friday 11 March at the QUT Gardens point campus. Prof. Arkin is one of the most highly respected robotics researchers in the world and holds the rank of Regents' Professor. He is the Director of the Mobile Robot Laboratory at the Georgia Institute of Technology. Prof. Arkin's research interests include behavior-based reactive control and actionoriented perception for mobile robots and unmanned aerial vehicles, hybrid deliberative/reactive software architectures, robot survivability, multiagent robotic systems, biorobotics, human-robot interaction, robot ethics, and learning in autonomous systems. He has over 170 technical publications in these areas.

Prof. Arkin has written:

- A textbook entitled <u>Behavior-Based Robotics</u> published by MIT Press in May 1998;
- Co-edited (with G. Bekey) a book entitled Robot Colonies published in 1997; and
- A book published in Spring 2009 entitled

Governing Lethal Behavior in Autonomous Robots published by Chapman-Hall (Taylor & Francis).

#### Navinda Kottege



Professor Ronald C. Arkin

# Microwave Theory and Techniques/Antennas and Propagation Societies



KONSTANTY BIALKOWSKI konstanty@ieee.org

#### **Committee:**

Chair: Konstanty Bialkowski, University of Queensland Vice-chair: Antony Liu, The University of Queensland Vice-chair: Morteza Shahpari, Griffith University Secretary: Mostafa Shabani

This year we have a new committee including Konstanty Bialkowski (Chair), Antony Liu and Morteza Shahpari (Co-Vice-chairs) and Mostafa Shabani (Secretary)

This year we are aiming to have a balanced program of industry, academic and student events. You can also expect a few Distinguished Lecture speakers from the APS and MTT societies, as we are discussing these plans with the other MTT/AP chapters in Australia. Our chapter <u>page</u> is now on the new IEEE-Queensland website thanks to the webmaster Mike.

Our upcoming seminars as well as information (including photos) on past seminars are available there.

If something is missing, please be aware some of the old content hasn't yet been migrated over, so please check the old website <u>here</u>.

## Oceanic Engineering Society



DR. NAVINDA KOTTEGE Navinda.Kottege@csiro.au

Queensland Representative: Dr. Navinda Kottege, CSIRO

The Australian Oceanic Engineering Society Chapter will be the technical co-sponsor of the "IEEE Coasts and Ports 2017 Conference"to be held in Cairns, Queensland. The conference is expected to be attended by 300 delegates and attract around 200 paper submissions.

## Power and Energy & Dielectric and Electrical Insulation Societies



DR. NILESH MODI nilesh.modi@aemo.com.au

**Committee:** Chair: Dr Nilesh Modi, AEMO Vice-chair: Rahul Sharma, University of Queensland Secretary: David Batterham

PES/DEIS is a very active chapter in the Queensland section.

Following list of events have already been held in 2016:

- "Planning in the Real World", by Prof. Simon Bartlett, The University of Queensland
- "Research Activity Required for Future Energy Supply", by Dr Bevan Holcombe, CEO Elevare Energy
- "Large Scale Renewable Generation for Queensland", by Andrew Deme, General Manager Network Development, Ergon Energy
- "Power Semiconductor Devices: Key Enabling Technology for Future Power Electronic Systems"by Leo Lorenz, Technology Advisor, Infineon Technologies Munich, Germany.

PES/DEIS has already planned the following future events:

- "Wind Generation and their Grid Connection", Prof. Janaka Ekanayake University of Peradeniya, Sri Lanka.
- "Australasian Universities Power Engineering Conference (AUPEC2016)", The University of Queensland, Brisbane, Australia 25-28 September, 2016. The theme of the conference is "Increasing Renewable Generation and Battery Storage in Power Systems".

For details on the past events and upcoming events please visit the <u>PES website</u>.

### Women in Engineering



MARIE-LUISE WILLE m.wille@qut.edu.au

**Committee:** Chair: Marie-Luise Wille Vice-chair: Negareh Ghasemi Secretary: Alexandra Posoldova

With the new committee in place we had our first IEEE Women in Engineering promotion event on the 17th of March 2016 at QUT.

Together with GEMS (Girls in Engineering Making Statements) from QUT, our WiE committee had an information session about IEEE in general and Women in Engineering in particular with the main aim to attract new members. Although attendance was low, we received four new membership applications. The information session was followed by free pizza, which was well received and facilitated a vibrant interaction. We will work in close relationship with GEMS in the future.



Future events will include a professional development session "Be a star on LinkedIn how to promote yourself" and seminars about different topics such as "Big Data", "Webpage Development", etc. A questionnaire to WiE QLD members will be sent out soon for feedback on planned events.



To stay up to date, don't forget to like the IEEE Women in Engineering Queensland Facebook page!



### Young Professionals Program



ALEXANDRA POSOLDOVA alexandra.posoldova@griffithuni.edu.au

**Committee:** Chair: Alexandra Posoldova Vice-chair: Reuben Peterkin Secretary: Rob Makaremi Treasurer: Hamid Moghadam

After finishing 2015 with a number of successful events, Young Professionals affinity group had a great start to 2016. First and foremost, we have a new chair Alexandra Posoldova and treasurer Hamid Moghadam.

Early this year, Alexandra Posoldova represented Young Professionals Queensland in the first Australia New Zealand Young Professional tele-conference. This collaboration on a national level opens new opportunities for our affinity group, and means better events and new highlights for our members. For more information about events in R10, checkout the page.

This year, Young Professionals affinity plans to organise several seminars and events. Here is line up for the upcoming months.

#### Leadership for Engineers - 30th of March 2016

The first seminar is called Leadership for Engineers and will be held on 30th of March at Griffith University Southbank Campus Brisbane. Our guest speaker, Phoebe Tee is a project manager at the Public Safety Business Agency. Prior to her management career, Phoebe was a senior mechanical design engineer at Motorola, where she designed various components of cutting edge communication devices. Registration is free and can be found <u>here</u>.

#### **Big Data – April**

Everyone is talking about Big Data. What does it mean and why you should get yourself familiar with this topic? Associate Professor Xue Li from DKE Division, School of Information Technology and Electrical Engineering, The University of Queensland will explain why this is such a hot topic. He was listed as one of "The Most Powerful People in Australia" on Big Data by the Financial Review - the Power Issue 2015. He achieved the Microsoft Start Up Q Award 2014 and is Winner of the Best Use of Open Data QLD Premiers Awards for Open Data 2014. Dates, time and location for this lecture will be notified later.

#### What you need to know about Startups - May

Who doesn't want to get rich overnight? It is a great opportunity for engineers from all different fields to bring their ideas to life. Startups are in the spotlight and everyone can make it from zero to the top. Our guest speaker Edward Horwood has firsthand experience. He is winner of The Bond Business Accelerator program. He recently kicked off another two businesses of his and will share his experience with you. Dates, time and location of the lecture to be specified later.

To get the latest updates on our upcoming events follow us on <u>Facebook</u> as well as IEEEs integrated on-line community <u>Collabratec</u>.

We look forward to seeing you at our events.

### Griffith University Gold Coast Student Report



**REZA AKBARZADEH** reza.akbarzadeh.au@ieee.org

#### **Committee:**

Chair: Reza Akbarzadeh Vice-chair: Matthew Jay Secretary: Tim Alroy Treasurer: Elise Jenkins

The IEEE Student Branch at Griffith University Gold Coast Campus became operational in September 2015. Since its inception the branch has organised a number of activities that have been well received by both students and academics on campus. In 2016 the branch has held two events and aims to provide further social and educational activities for members throughout the year.

The following activities have been held in Q1 2016:

#### Meet and Greet Promotional Activity Date: Monday 14th March 2016 Presenter: Dr Andrew Seagar

This event attracted over 40 attendees, most of which were undergraduate students keen to explore what IEEE has to offer. The purpose of this event was to expand the IEEE community within Griffith University by recruiting new members. The branch also used this opportunity to present to the attendees our plans for the 2016 academic year. Light snacks and refreshments were provided.



Reza and Matthew presenting at the meet and greet

#### Seminar: "Adventures in the Communications Industry" Date: Thursday 17th March 2016 Presenter: Prof. JC Olivier

The Griffith University IEEE Student Branch was fortunate to host a seminar delivered by the University of Tasmania's Professor JC Olivier on "Adventures in the Communications Industry"

Prof. JC Olivier received his PhD in 1990, before joining Bell Northern Research in Canada, where at the time, the first cell phones were being developed. In 1999, he moved to Nokia Research Labs in the United States as a Principle Scientist where he was one of the co-inventors and contributors towards the widely used 2.5G and 3G wireless standards. Until 2003 JC continued to contribute towards the emerging 4G standard. In 2004, he became a Professor of Engineering at the University of Pretoria and then Professor of Engineering at the University of Tasmania in 2011.

JC is a former Editor of two IEEE journals, and has acted as Technical Program Committee co-chairman for the IEEE International Conference on Communications that was held in Cape Town in 2010.

The duration of the seminar was two hours. During this time JC shared information about his career journey and spoke about current opportunities in the communications industry. He also fielded questions from a number of students. The students and academics in attendance found the seminar particularly insightful



and were inspired by JC's accomplishments.

Prof. JC Olivier

Activities planned for Q2 2016:

#### "Know Your Industry"Networking Event Date: Tuesday 5th April 2016 Presenters: TBC

One of the main goals of the branch is to connect Griffith Engineering students from the Electrical, Electronic, Biomedical and Mechatronic cohort to industry. It is well known that in recent years the collaboration between industry and academia has slowly declined. As engineering students, we find it particularly helpful to gain the real world perspectives of engineering professionals due to their exposure to the different challenges faced in industry. In a bid to help bridge this gap, the branch is hosting an evening that will include presentations from industry representatives, dinner and time for networking. This event will provide students with an opportunity to gain a better understanding of their industry and what it is like to be an engineer in 2016.

In attendance at the event will be industry representatives from the public and private sector including representatives from Energex, AEMO and Schneider Electric. The event has thus far gained considerable interest from students, academics and faculty staff. The event details are on the next page.

Contact us on <u>Facebook</u> or Email at (gugcieee@gmail.com) or visit our <u>website</u>.



### **Griffith University IEEE Student Branch** 'Know Your Industry'

Date: Tuesday 5<sup>th</sup> April 2016

Time: 17:00 – 20:00

Location: G11 4.28 (Sky Lounge)

#### Space is limited:

To reserve your seat, please RSVP to <u>bit.ly/IEEEIndustry</u> or use below QR code.





Griffith University Student Branch

#### GU IEEE Student Branch presents:

'Know Your Industry' Networking Event

This events provides an opportunity for students to gain a better understanding of their industry, as well as expanding their industry network.

All students from Electrical, Electronic, Mechatronic and Biomedical disciplines are welcome!

#### Dinner will be provided!



# Power and Energy University of Queensland Student Branch



HANXIAO ZHANG hanxiao.zhang@uq.net.au

**Committee:** Chair: Hanxiao Zhang (B. Eng at University of Queensland) Vice Chair: Lakshitha Naranpanawe (PhD Eng at University of Queensland) Secretary: Xinren Marcus Jiang (M. Eng at University of Queensland)

The University of Queensland Student Branch is one of the most active student branches in Queensland. There were two activities in March:

- A guest lecture from two researchers, Stephen Fraser and Andrew Olson (CSIRO) "Developing Data Mining and Visualization Techniques for the Integrated Analysis of Complex, Spatiallylocated Data Sets for Both Exploration and Mining Purposes", 21st March 2016
- "IEEE Information Session and Pizza Lunch" (Membership Drive), 24th March 2016.

Major future activities include:

- Career and Networking Event
- Technical Software Workshop Series
- Introduction To Research Project Strategy Seminar

## **Queensland Section Office Holders**

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