IEEE
Advancing Technology for Humanity

CIRCUIT

The Institute of Electrical and Electronics Engineers, Inc.

Volume 40   Issue 3

November 2011

Contents

Editorial

In August of this year I was lucky enough to be sponsored by the NSW Section to attend the IEEE Sections Congress 2011 in San Francisco. As many of you will be aware, the purpose of the Sections Congress is to train appointed section delegates on how to better their respective Sections and to vote on recommendations to make IEEE better serving to its members and community. Some 1100 members from over 90 countries attended the Congress, with representatives from 294 Sections and 41 Technical Societies/Councils. The top 5 recommendations made at the 2011 Congress can be found at the following website:

http://www.ieee.org/societies_communities/geo_activities/sections_congress/2011/index.html.

Region 10 Delegates

The trip highlighted for me the great opportunities open to active committee members not only to be sponsored to travel abroad and meet/network with other engineers (indeed while there I was able to make numerous new IEEE and business contacts), but also to get involved in IEEE activities and initiatives at an international level. A standing invitation is open to all members to come along to our monthly committee meetings and see what it's all about!

As always, please feel free to e-mail me with any articles (or suggestions for articles) that you would like to be included in future editions of Circuit. I look forward to seeing you all at the annual AGM and dinner later this month.

Mark O'Mally markomally@ieee.org
Editor, Circuit Newsletter, NSW Section

1. Message from the Chair

The NSW Section AGM and Dinner will be held on 25 November 2011 at Novotel Rockford Darling Harbour. This is an excellent opportunity for you to network and celebrate a great year. For those who have not sent their RSVP, please do so as soon as possible because seats are limited. Details of the AGM and dinner (together with an RSVP form) can be found in this newsletter and I look forward to seeing you there.

Every three years, IEEE MGA organises the Sections Congress for all Sections to participate, be trained and exchange experiences with the aim of encouraging member participation and retention.

The Sections Congress 2011 was held from 19 - 21 August 2011 in San Francisco. A visit was held during the Congress to the Computer History Museum, Mountain View, California which is the world's leading institution exploring the history of computing and its ongoing impact on society. Mark O'Mally and Graeme Gwilliam from our Section joined me for this event.

During the Congress I was invited to join a focus group to discuss the IEEE volunteers' experience and knowledge. I also had a few discussions with the Education, Membership Development, Community and MGA teams. They have a number of programs that we are looking to pursue in the near future.

Back home, NSW Section Membership Development Chair, Bruce Poon is working closely with universities to increase student member recruitment. We recently sponsored an award and participated with UNSW for the iToF Competition and Exhibition 2011. Also, earlier this month we sponsored the Best Post Grad Student Paper Award for Engineering and Information Technology at the University of Sydney.

To revive Graduates of the Last Decade (GOLD) activities in NSW, we have appointed a new NSW Section GOLD Chair, Yogeshwar Ranga from the CSIRO. I encourage members who graduated less than 10 years ago to join GOLD. Please contact Yogesh at Yogeshwar.Ranga@csiro.au

As the year draws to a close, I would like to take this opportunity to wish you a very Blessed Christmas and a Happy 2012 ahead. God bless you all.

Eddie Fong eddiefong@ieee.org
Chair, NSW Section

2. News in Brief

2.1 Graduates of the Last Decade (GOLD)

Being an IEEE volunteer for the last four years has been very rewarding and has given me many opportunities to lead, represent and network with members on a number of different levels. It is now my privilege and honor to accept the role of Chair of the NSW GOLD Affinity Group for 2011-12.

By way of background, I have recently finished my PhD studies at Macquarie University, Dept. of Electronic Engineering. During my time at Macquarie University I was actively involved with the IEEE Student Branch. Our IEEE Student Branch achieved a number of significant milestones in the past few years, one of which being to achieve second place in the Region 10 Student Branch Competition earlier this year.

The purpose of GOLD is to help students transition to young professionals within the larger IEEE community.

Benefits and general information about GOLD membership can be found at http://www.ieee.org/membership_services/membership/gold/index.html

We are currently looking for young volunteers who have the passion and enthusiasm for serving the technical community to which they belong. I would like to invite all GOLD members to consider nominating for various volunteer positions available in the IEEE NSW GOLD Affinity group.

As a first networking opportunity, I would like to invite all GOLD members of IEEE NSW Section to attend the Annual General Meeting on 25 November 2011. Please note that Affinity Group and Chapter AGM's will start at 6:00 pm. If you would like to find out more please e-mail me.

Yogesh Ranga yogeshwar.ranga@csiro.au
Chair, NSW GOLD Affinity Group

2.2 NSW Committee Nominations

Recently someone seems to have fitted square wheels to my little band wagon, and the road has been quite rough. The proposal to use the IEEE package 'vtools' to conduct an electronic ballot for the NSW Section Annual Elections unfortunately foundered due to a breakdown in communications within the committee for which I must apologise. This means that for 2011 we will again be conducting a 'paper' ballot at the AGM for the elected officers and Section Committee for 2012.
The nominations are: Chair, Eddie Fong, Vice Chair, Ian Boyd and Secretary, Antony Zaglas. All of these gentlemen have completed one year following their election in 2010 and are eligible to stand again in compliance with the "IEEE 2 year Rule". The nominee for Treasurer is Mark O'Mally.

IEEE rules require that there are two names for each position so if anyone would like to have their name on the ballot paper as another candidate please contact me.

The nominees for the NSW Committee are Mrs Lyria Bennet Moses, Dr Trevor Blackburn, Dr Kim Chin, Mr Errol Chopping, Mr Nassir Fakhouri, Dr Ali Hellany, Dr Walter Lachs, Mr Bruce Poon, Mr Stefan Mozar and myself in addition to the elected officers listed above. Chairs of the various Chapters and Affinity Groups are also members ex officio.

Elsewhere in this edition will be information pertaining to the AGM meetings of the various Chapters and Affinity Groups. Please endeavor to attend these meetings and support the elected officers.

Dr. Graeme Gwilliam gb.gwilliam@ieee.org
Chair Nominations, NSW Section

2.3 IEEE Technologies of the Future (iToF) 2011 Competition and Exhibition

The third annual IEEE Technologies of the Future Competition and Exhibition was organised by the IEEE UNSW Student Branch on the 24th October 2011 at the University of New South Wales (UNSW). It is a continuation of the iToF initiative taken up by a group of student volunteers from the Faculty of Engineering at UNSW in 2009 to find answers to three daunting questions related to research: first, technical correctness; second, its potential impact; and third, capturing the attention of industry and research organisations.

The initial vision for the Technologies of the Future event was to provide a forum where UNSW postgraduate students are able to present their research, get feedback from a panel of judges from different engineering disciplines, and to interact with related industries and research organisations. However, this year's event was unique in many ways; iToF 2011 was expanded to allow entries from all universities in NSW, and attracted not only postgraduate students but also undergraduate students and early-career researchers. iToF 2011 featured three main tracks:

Track-1: Project Demonstration for Undergraduates, where the topics of interest included working systems, platforms and tools, applications, novel ideas and other interesting concepts.

Track-2: Poster Presentation for Postgraduates, which was further categorized into: Energy and Green Environment (EGE); Improving Quality of Life (IQL); Fast, Reliable and Secure (FSR); Towards Miniaturisation (TM); and, Automation and Adaptation (AA).
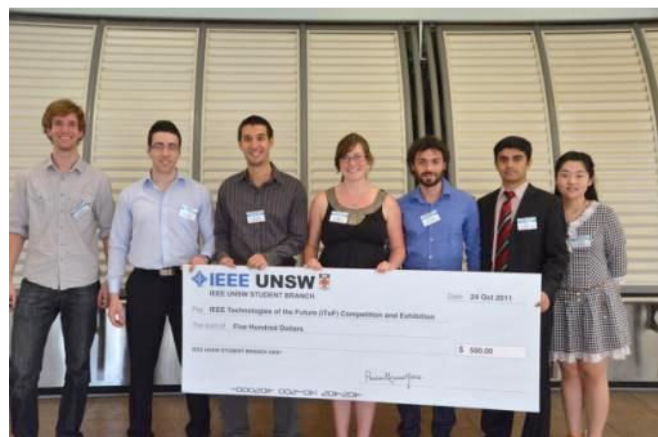
Track-3: Research Exhibit for Early-Career Researchers, that included a broad-range of post-doctoral research projects across various engineering disciplines.

The event was opened by Prof. Graham Davies (Dean, Faculty of Engineering, UNSW). A keynote talk was given by Dr. June Andronick (Researcher, NICTA) who has recently been recognized by MIT Technology Review as one of the World's Top Young Innovators (TR35 Honoree for 2011).

There were a total of 29 exhibits from three leading universities in NSW: UNSW, University of Sydney and University of Newcastle. The event was supported by the Faculty of Engineering at UNSW, ARC UNSW, and sponsored by IEEE NSW Section, element14, Dolby, CISRA, CSIRO and NICTA.
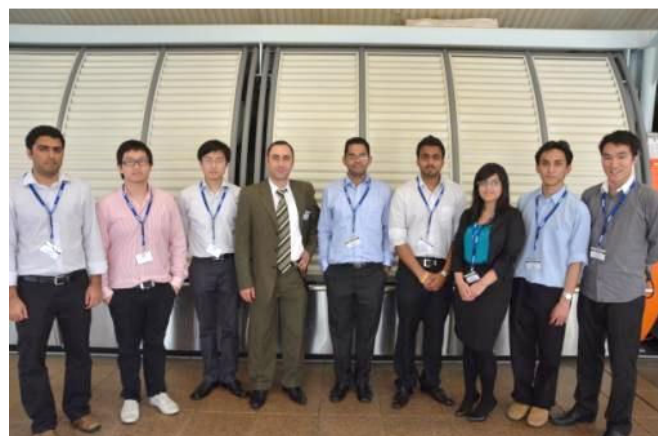
There were a total of eight cash prizes: first ($500) and second place ($300) in Track-1, and a winner in each of the remaining 6 categories (5 in Track-2 and 1 in Track-3) ($500). The winner of each category (listed below) received the cash prize and an achievement certificate. All participants were acknowledged for their involvement by a participation certificate.

Prize Winners (from left to right): Juan Pablo Dehollain, David Moussa, Ben Cassidy, Sarah Mcdonald, Giovanni Geraci, Libin George, Liwei Li

IEEE UNSW Student Branch is a society of engineering students that receives support from the Institute of Electrical and Electronics Engineers (IEEE), School of Electronic Engineering & Telecommunications, School of Computer Science & Engineering, School of Mechanical &Manufacturing Engineering, School of Surveying & Spatial Information Systems, School of Photovoltaic & Renewable Energy Engineering and School of Biomedical Engineering within the Faculty of Engineering at UNSW.

The Branch thanks the iToF 2011 Organizing Committee and volunteers (listed below) for their dedication and commitment to make this year's event a resounding success.

iToF 2011 organising committee (from left to right): Haris Javaid, Daniel Witono, Kent Tran, Dr. Elias Aboutanios, Prasant Misra, Thanu Abayaratna, Sahrish Wahid, Muhammad Syafiq Husni Ahmad Zawawi, Jeffrey Susanto

Chair: Prasant Misra; Vice-chair: Haris Javaid; Secretary: Muhammad Syafiq Husni Ahmad Zawawi; Treasurer: Jeffrey Susanto; Website Administrator: Kent Tran; School Representatives and University Contact Officers: Sahrish Wahid, Giriram Chandrasekaran, Irene Tsimos, Ali Samirad; ARC Delegate: Thanu Abayaratna; Volunteers: Daniel Witono, Benoy Varghese; Mentor: Adeel Razi; Counsellor: Dr. Elias Aboutanios.
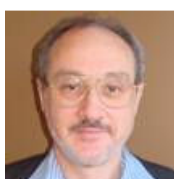
For more information and latest news and events, please check the IEEE UNSW Student Branch website.

2.4 Appointment of Iain Collings to Adjunct Professor

Prof Iain Collings has been appointed as an Adjunct Professor at the University of Sydney in the School of Electrical and Information Engineering, where he supervises PhD students and contributes to the teaching program. Iain was previously on the academic staff of the School, from 1999-2005. Since then, Iain has had a continual link to the University's teaching and research program, including teaching fourth year advanced digital communications courses, supervising honours student projects, and conducting joint research with academics and postgraduate students in the area of wireless broadband communication systems. He is currently the Research Director of the Wireless and Networking Technologies Laboratory in the ICT Centre at CSIRO. The Lab includes 65 research and engineering staff, and has major research programs in broadband wireless communication systems for rural and regional areas, wireless sensor networks, wireless position location technologies, and antenna technologies for radio astronomy. Iain also holds Adjunct Professor positions at Macquarie University and the University of Queensland. Prof Collings is a past NSW Section Secretary and Past Chair of the NSW Signal Processing/Communications/Ocean Engineering Chapter and a current NSW Section Committee member.

On behalf of the NSW Section Chair Eddie Fong and the NSW Section Committee I wish Prof Collings all the best in his role at Sydney University.

Tony Zaglas antonyz@ieee.org
IEEE NSW Section Secretary

2.5 AGM and Annual Dinner

The NSW Section Annual General Meeting (AGM) will be held at the Novotel Rockford, Darling Harbour on 25 November 2011.

Chapter and Affinity Group AGM's start at 6pm, followed by the Section AGM at 7pm. A delectable seafood buffet will follow after the conclusion of the NSW Section AGM at approximately 8pm. The NSW Section will again be covering the cost of the dinner. **The RSVP date has been extended to 15 November 2011.**

Further information (including a map pointing to nearby parking) can be found on the booking slip on page 11 of the newsletter.

2.6 IEEE R10 Student Conference

In July of this year, I was lucky enough to be able to represent IEEE NSW section at the IEEE region 10 Student Conference held in Auckland, New Zealand. The Conference was attended by members representing various IEEE subsections including GINI (Global Integrated Network of IEEE), WIE (Women in Engineering) as well as GOLD (Graduates of the Last Decade), each of which had previously held separate individual conferences in the past, but met together in Auckland for this three day mega-conference.

The Conference was well planned and managed. There was a healthy balance of technical talks, IEEE related talks, networking opportunities as well as leisure time, which made the experience a lot of fun. On the second day of the event, a number of talks on topical subjects were given including talks on cloud computing, emission trading schemes, LED lighting technology and smart grids. The technical talks highlight the benefits for IEEE members, providing a great way of keeping in touch with cutting edge technology. The final day focussed on techniques for strengthening the IEEE societies of which the participants are members. One particular highlight was a talk given by the Karachi IEEE Student Branch in Pakistan. They have been able to attract hundreds of IEEE members as well as successfully establish relationships with local and international businesses such as Microsoft, in turn forging valuable links between industry and academia. This talk was valuable as it shows the extent to which the IEEE student branches can grow.

Many senior members, such as the Chairman of Region 10, attended the conference. A common theme was that they all started from student branches with their respective universities and were able to gradually climb the IEEE hierarchy; the message being

that if you are willing to help your society and serve your members, you will be rewarded in the long run.

Despite the packed schedule, the organisers were able to fit in a good amount of leisure activities and networking opportunities, such as BBQ night, culture night and dinner on a floating restaurant. The combination of networking opportunities, learning about IEEE organisation and the inspirations I got from seeing other IEEE societies thrive and succeed made this trip highly memorable and useful. Many thanks for IEEE NSW section for sponsoring me.

Jeffry Susanto
Treasurer, UNSW student branch

2.7 Macquarie University Engineering Colloquium (MQEC) Updates

MQEC, initiated in 2010 with IEEE NSW sponsorship, reached new heights this year, supported by the IEEE MQ Student Branch.

In September the MQEC held two external lectures. The first lecture, by Dr John Yuzhu You, was on the topic of global warming and climate variability, entitled "Using Submarine Communications Networks for Ocean/Climate Monitoring and Disaster Warning" and covered the fields of ocean climate, climate variability and global warming. The second external lecture, delivered by Dr. Andrew Madry and entitled "Signal Processing Methods used in the Treatment of the Abnormal Cardiac Arrhythmia - Atrial Fibrillation," covered the typical effects of algorithms when applied to cardiac signals.

In our internal lecture series two talks were also delivered in the month of September. The first talk was by PhD student and branch committee member Mr Yam Siwakoti on "Integrated Electronics for Renewable Energy Systems" outlining the research he is currently doing on the quasi Z-Source Inverter (q-ZSI) for power stations. The second talk was delivered by the current branch Vice-Chair, Dushmantha Thalakotuna, entitled "Lumped Circuit Equivalents and Dispersion Analysis of a Reconfigurable Periodic Structure" outlining his research on the method of using equivalent circuit representation of a periodic structure to predict dispersion behavior.

More details of all internal and external MQEC talks with detailed abstracts and author biographies are available on MQEC website:
http://www.engineering.mq.edu.au/colloquia/.

If you wish to participate in the external series please contact Professor Graham Town, current editor of the MQEC series.

Student Branch Updates

I have submitted my thesis and my term as Student Branch Chair has ended. Dushmantha Thalakotuna, who was previously serving as Vice-Chair, has been appointed as the new Chair. The last three years have been an exciting period for me, during which time I held various positions within the IEEE Student Branch and together with our team achieved many significant milestones. Some of these milestones included achieving second place in the Region 10 Exemplary Student Branch Competition, being a part of a successful MQEC series, reporting the highest number of activities in 2010 IEEE AGM meeting, participating in the organisation of the first IEEE Australia New Zealand Student Congress (ANZCON 2010) in Melbourne and running the IEEE Student Branch Website (http://engineering.mq.edu.au/~ieeesb/).

IEEE MQ Student Branch Executives and Committee Members with Academics and Administrative Staff

I would like to thank the members of the student branch team, Dush, Carl, Basit, Quang, Shahidul and other post graduates and especially the Branch Counsellor Prof. Karu Esselle for being a great motivator and advisor. Thank you!

I wish the newly elected branch and branch members the best of luck for the coming year. The complete list of newly elected committee members is as follows:

Dushmantha Thalakotuna, IEEE Student Branch Chair
Carl Svensson, IEEE Student Branch Vice-Chair
Basit Ali Zeb, IEEE Student Branch Secretary
Md Shahidul Islam, IEEE Student Branch Treasurer

Yogesh Ranga, Immediate Past Chair
Karu Esselle, Counsellor
IEEE Student Branch, Macquarie University

2.8 SSIT (Society on Social Implications of Technology) Chapter

SSIT is a national chapter exploring the social implications of technology. It is a chapter open to all IEEE members (and we encourage you to sign up for SSIT when you renew your IEEE membership).

Much has been happening in SSIT, both in Sydney and more broadly. In Sydney, Tim Cousins recently presented on Before, During and Recovering from a Disaster: Your part in Making it Happen at the University of New South Wales.

SSIT is currently organising a conference on Technology and Society in Asia next year (Sunday 28 to Monday 29 October 2012) marking the 40th anniversary of SSIT's origins. The conference will be held in Singapore and will provide the opportunity for both academic researchers and industry professionals to present, discuss and network across the region. Stay tuned for further details closer to the time.

Finally, SSIT (Australia chapter) has sponsored a new blog, The Social Interface (www.thesocialinterface.com). We hope that members of IEEE NSW will check it out, comment in response to the blogs, or even make a featured contribution by contacting the editors at editors@thesocialinterface.com. The opening editorial (by editors Sarah Lux and myself) sets out some of the goals of the blog, which has already included contributions on e-democracy, human micro chipping, 3D printing, research via video games, and e-publishing.

Our experience of the world is mediated through technology. Technology affects our access to and analysis of information, the extent to which we are monitored, the composition of the air, the people with whom we connect and the length of our lives, among other things. Decisions about technical designs made by engineers, scientists and managers as well as decisions by politicians about funding and regulation shape our technological landscape. The Internet is a good example – it began as a project of the US government but decisions about its design came from engineers. The fact that the Internet allows for open communication, as well as the fact that it is possible for marketers to collect data about users, are both the result of design decisions, whether conscious or unconscious. The choices made by engineers and governments matter.

In the academic world, philosophers, sociologists, anthropologists, historians, lawyers and others have written extensively on the relationship between technology and society. This blog aims to connect those thinking and writing about technology with those who design it and those who use it.

Contributors to the blog will be professionals and academics from a range of relevant fields, including engineering, law, science, medicine, development, social sciences and the arts, who will be invited to stimulate discussion on the social impacts of technology as observed through the lenses of their own fields. We encourage you to be an active participant in the conversation, using the comments section beneath each featured contribution. How does the subject matter impact your own field? What are the key questions, problems and solutions as viewed through the prism of your experience or practice? Perhaps you agree with the contributor in question, or perhaps you vehemently disagree. Either way, you are encouraged to engage in the debate.

Who are we? Lyria, an academic in the law faculty at UNSW, is interested in the relationship between technology and law, and how changes in each influence the other. Sarah, an intellectual property lawyer, is interested in how protection of intellectual capital and provision of access to technology impact social mobility and human development. This blog was born out of our mutual realisation that, as lawyers interested in the social implications of technology, we have few opportunities to share ideas with the engineers, scientists, medical practitioners, historians, philosophers and many other breeds of professionals and academics who daily engage in consideration of the same. We aim to connect thinkers and writers from all relevant fields, as well as the broader community, and to provide meaningful opportunities for knowledge sharing, collaboration and debate between them.

If you are interested in making a featured contribution, let us know at editors@thesocialinterface.com. If you want to receive the blog in your inbox, subscribe by entering your email address in the box to the right (we will not use your details for any other purpose). If you have a question, comment or counter-argument to one of the contributions on the site, leave your thoughts in the comments section provided beneath the post.

We trust that this blog will entertain you, inspire you and, most of all, make you think.

Welcome to The Social Interface.

2.9 Postgraduate Student Conference

The third Postgraduate Student Conference was held at the University of Sydney on Monday 31 October, 2011. The conference built on a historically successful series of annual conferences held by the Graduate School of Engineering & IT at the University over the years, showcasing the great research being conducted in engineering and IT, as well as creating cross-collaboration between postgraduate students and promoting links with industry.

NSW Section Secretary Tony Zaglas presenting Miss Emma Fitzgerald with the Best Student Paper Prize for IT

Past NSW Section Chair David Tien presenting Mr Zijie Zhang with the Best Student Paper Prize for EIE

The conference this year attracted 31 contributions from current senior postgraduate engineering and information technology students within the faculty. Congratulations to this year's prize winners, Mr Zijie Zhang and Miss Emma Fitzgerald (see above photos).

2.10 Senior Member Update

For members who are qualified to be senior members, I would like to urge you to upgrade to senior membership in order to boost the status of our section. To upgrade to senior member, you will require three referees. However, if you are being nominated by the section, you only require two referees.

Bruce Poon bruce.poon@ieee.org
Membership Development Chairman, IEEE NSW Section

2.11 Welcome to our New and Upgraded Members

Senior Member Cont.

Neil R Browne
Peter J Vial
Branko G Celler
Gernot Heiser
Jinhong Yuan
Tomasz Bednarz
Samsung Lim

Member Grade

Andrew N Mears
K I Findlay
Michael L Otero
Steven J Scheding
Hassan Achi
Weidong Su
David J Browne
Shanheng Zhao
Lei Shang
Ahsan A Chaudhry
Md A Abdullah
Joao Carlos Aydos
Farid M Ahmad
Gregory Chan
Pasquale Aliberti
Katherine E Cassidy
Jon Keeble
James F Roberts
Kassem Morad
Muralee Krishnan M
Weizhen Zhou
Gilbert Verdian
Spyridon Revithis
Harley Frankfurt
Nicholas J Webb
Alex H Ng
Dale R Bates
Susan Bruck
Chung-How Poh
Liviu Constantinescu
Wencke Lehnert
Mehdi Bagheri
Jude A Angelo
Peter W Davidoff
Kam H Fung
Yang Li
Gehendra Acharya

Member Grade Cont.

Ka Ming Leung
Anthony N Laskovski
Benjamin P Haines
Wei Li
Ravi J Mccosker
M A Al-Rabayah
Lester Chong
Anna Ceguerra
Evan Tan
Nai Shyan Lai
Nidhal Odeh
David J Maunder
RUI LI
Mark Whitty
Adam Joseph Watson
M H A Zawawi
Kun Pang
Matthew Scott
Yogeshwar Ranga
Simon T OCallaghan
Serge Rozentsvet
Md Tanvir Yeasin
Nicholas R J Lawrance
Justin Gregory Suwart
Nassir Fakhouri
Daniel Schlagwein
Mark L Humphery
Stephen Joseph Dowdell
Mohammad Saab
Syed Taha Ali
Dimitri Semenovich
Chris Druitt
Terence Chen
Ian David Laird
len Nnamdi Diala
Weihong Wang
P Vithayasrichareon
Chao Sui
Jeffry Susanto
Rowan Humphreys
Mas Sahidayana Mohktar
M A Cheema
Nitin Nampalli
Prajyot Vishnudas Naik
Cheng-Chung Lin
Nawid Jamali

2.11 Welcome to our New and Upgraded Members (cont.)

Member Cont.

Aresh Daruwalla
Marcel Julliard
Qi Li
Gareth Samuel
Akram AlSukker
Arash Sadrieh
Bilal Moukahal
W N Shuhadah Wan Nik
Zhuoyang Chen
ALI AKBAR SAMIRAD
Rob Manson
Debbie Vivian
H Halomoan Sinaga
Chenyu wang
Sami saadeh
Nicholas John Anderson
Feng Bian
Chong Han
Boney M Mylady
Martin McGrane
James Luke Coyte
Fernando Felipe Calero
Jason Lam
Sudeep Timilsina
Thuppahige Ann Suwaris
Dong Niu
Jose F Zubizarreta
Seng Keat Gan
Alistair Reid
Gabriel Agamennoni
Rod Jason Taylor
Muawiyath Shujau
Puja Thapa
Robert C Klicek
Anand S Venkatachalam
Andrew Nicholson
Cherry Ballangan
Jiyong Wang
Apoorv Mintri
Masnida Binti Hussin
Xue Wei
Jung-Ha Kim
Saleh A Alkhamis
Charles Harry Finch
He Zhang
Dulani N Wasalthilake
Derek Tze Wei Chu
Monte Chan
Adam George Thwaites

Member Cont.

Paul Robert Thompson
Brandon Bosse
John Robinson
Hua Ouyang
Melissa Prema Anenden
Athanassios Boulis
Cong-Van Nguyen
Adam Nissen
Dinesh Ramanan
David Yuen
Laeeq Muhammad Hamid
Zhiyu Xi
Darren Hinchliffe
Ali Haydar Goktogan
Julian Higginson
Pablo Uribe Gomez
Bruce Kevin Ellis
christian grillet
Ralf Huuck
Allan James McCarthy
Georges Alam
Huaizhong Li
Scott Alexander Rudkin
Yi Da Xu
Guy P Tucker
Jue Wang
Moninya Roughan
Jitender Singh Singra
Henry Ko
Ashween A Prasad
Adam Broadway
Jun Li

Grad Student Member

Gregory R Maslen
Babak Saghaie
YiFei Dong
Josef Schneider
Ilung Pranata
Navid Nourani Vatani
Cliff Harris
Jason Hambly
SHAN CHEN
Andrei Lachsz
ZELIN LI
Anh Huy Phan
vahid behbood
Raed Manna
Mohammad Ariful Huq

Grad Stud Member Cont.

Timothy John Hiatt
Purushottam Duwal
Bassel Skaf
Felix Ridwan
Basant Kumar Sah
vamshi koyyada
Arash Khatamianfar
Stefanie Brown
Meng Chen
Thivya Kandappu
Giovanni Geraci
Xiang Zhao
Nigel Hughes
Zhu Sun
Elizabeth Louise Ratnam
Basit Ali Zeb
Irfan Sohail Syed
Diego A Chacon Fajardo
Guishi Wang
Dinesh K Thilakarathna
Qiong Zhao
Thi Khanh Van Tran
YING BI
Hyuntae Choi
Amer M Y M Ghias
Ashley James Cullen
Christopher J Brunner
Peter Morton
Mao SHAN
Andre Kyme
Mingxuan Zhu
Leonid Tsoy
Shijie Yin
Ravi K Reddy Kallam
Hongda Tian
Xi Chen
Dae-Yeon Won
Vahid Vakiloroaya
Sebastian J O Henriquez
Mahmoud EL Khodr
simon francis heslop
Gert Van Tonder
Mitchell Yuwono
Md Delwar Hossain
Ting Sun
Olivier Mehani

Student Member

Shah Md Hoque

Stud Member Cont.

Snehal A Tangadpalliwar
Azadeh Safari
Alexander Hayes
DANIEL OBANDO
Petr Stary
Sayed Assaad
Joanne Fu
Mishal Ahmed
Changliang Zheng
Beeshanga Abewardana J
Yam Prasad Siwakoti
Alexandra Louise Dandie
Rui Xu
Michael Weaver
Jack Killian Colwell
Kevin Loo
jared paxman
mohammed saleh
Zarin Saif
Salar Mohseni
Kehinde T Banjoko
Jeong Wook Seo
Bahareh Nazari
Hocine Karare
Xiguang Zheng
Perzila Arab
Daniel James George
Joseph Terrence Radford
Jane Alexandra Ireland
Luke Benjamin Exton

Associate Member

Shengjie Shao
Mochammad Rusli
Amir Farhangi
Mohamed A Mabrok
Saeed Al-Shahrani
David Hart
Michael James Lucas
Omar A P Perez
Le Chung Tran
Rimjhim Saxena
Tim Gerard Moore
Matthew Robert Keegan
Anthony Peter Kalcina
Yao Shi
Paul Backscheider
Dimitrios Georgakopoulos
Andrew Thomas Punch

3. Chapter News

3.1 Joint OCEANS/Signal Processing and Communications Chapter

2011 IEEE ComSoc Congress

The 2011 IEEE ComSoc Asia Pacific Chapter Chair Congress (AP RCCC) was held in Kyoto, Japan, on the 9th June, 2011, following the IEEE ICC. 19 representatives from the AP region attended the congress, including Communications Society Executives, Byeong Gi Lee (president), Shri Goyal (Director, Membership Programs Development), Naoaki Yamanaka, (Director, Asia Pacific), Gabriel Jakobson, (Director, North America), Josef David Gely, (Director, Latin America), Kwang Bok Lee (Vice Director, APB), Eiji Oki (Secretary/Treasurer, APB), Miki Yamamoto (CCC Vice Chair, APB), AP ComSoc Chapter representatives of Indonesia, Japan, Kerala, Malaysia, New South Wales, New Zealand North and South, Seoul, Tainan, Vietnam, Region 10 Awards and Recognition Committee Chair/Japan and Fanny Su (Manager, ComSoc Asia Pacific Office).

AP ComSoc Chapter Chairs

I attended the congress as the IEEE ComSoc New South Wales Chapter Chair. The congress started at 1pm with Prof. Miki Yamamoto, Vice Chair of ComSoc APB Chapter Chairs Coordination Committee (CCC) and Prof. Naoaki Yamanaka welcoming delegates to the AP RCCC. He updated us on the Japan tsunami and thanked delegates for attending ICC 2011 and the AP RCCC. All delegates introduce themselves. ComSoc President, Byeong Gi Lee, delivered his key note speech and presented the ComSoc Vision for 2020. The Vision seeks to achieve the three goals of ComSoc: advancing scientific & educational theory, practice and applications; promoting the professional standing of its members; and serving humanity by enhancing the quality of life of human beings. Shri Goyal gave a presentation showing trends in ComSoc membership and the need to focus on globalization, industry and young members. Naoaki Yamanaka highlighted the activities of the various APB committees.

The delegates then had an open discussion on "How to promote ComSoc activities and provide better service to ComSoc members in AP region". ComSoc Chapter representatives each presented their Chapter activities for 2010. I presented NSW activities in 2010, planned activities for 2011 and outlined the challenges that the NSW Chapter faces. In particular, members are very interested in attending IEEE WCNC 2012 and ISCIT 2012 which will be held in Australia next year. It was noted that there were many participants from Australia in the conferences but no representation at the APB meetings. The NSW Chapter is encouraged to participate in more APB meetings.

IEEE Communications Society Distinguished Lecture Tour 2011

On the 25th of August, IEEE NSW Communications/Signal Processing/Ocean Engineering Joint Chapter hosted the 2011 IEEE Communications Society's Distinguished Lecture Tour (DLT) in Sydney, Australia. This year's DLT was given by Prof Qian Zhang from Hong Kong University of Science and Technology (HKUST). Prof Zhang is a well known and active researcher in wireless communication and networking. She presented a lecture entitled "Cooperation in Cognitive Networks" at the UNSW School of Electrical Engineering and Telecommunications. Prior to the lecture Prof Zhang chatted with old friends, previous colleagues, and researchers from NSW. The lecture started at 3:30pm and finished around 5:00pm. It was attended by 52 IEEE members, student members and a few non-members. Attendees included academic staff, postdoc fellows, research fellows, research students and engineers hailing from various NSW universities (University of New South Wales, University of Sydney, etc), research institutes (CSIRO ICT Centre, NICTA), industry and organizations.

Prof. Zhang provided an interesting insight into dynamic spectrum access and cognitive radio technologies. With two well-chosen examples, Prof. Zhang showed that cognitive radio as a novel paradigm that can improve spectrum utilization by allowing secondary users to reuse portions of unused spectrum owned by primary licensed users. She also presented on co-operation communication technologies in cognitive radio to fulfil the heterogeneous traffic demand. She highlighted some recent advances in this hot research area and current industry trends. How the cognitive radio would affect the spectrum management policy and future wireless services were also discussed, prompting many questions and general discussion from the audience.

The lecture was followed by a late afternoon tea which was sponsored by the IEEE NSW Section. Further questions directed at Prof. Zhang were also asked during the afternoon tea. The afternoon tea provided a good opportunity for the lecturer and the audience to

socialise. The discussion finished at 6:20pm and was followed by an IEEE NSW Communication Chapter Committee Meeting.

The lecture by Prof Zhang was well received and very relevant to many members. DR Raymond Louie, an ARC Postdoc Fellow at the University of Sydney, commented "I am doing research directly related to Prof. Zhang's presentation and I found this talk very informative and interesting. Thanks for organizing it."

As the Chair of the Joint IEEE Communications/Signal Processing/Ocean Engineering NSW Chapter, I hosted the Prof. Qian Zhang's visit to Sydney, together with our NSW Chapter Committee Members, A/Prof Yonghui Li and Mr Olly D'Souza. We would like to thank Prof. Qian Zhang for her lecture. We would also like to thank Ms. Ewell Tan for coordinating the tour in Australia.

Further information about the DLT can be found on our Facebook Page:
http://www.facebook.com/pages/IEEE-Communications-Signal-Processing-Ocean-Engineering-Joint-Chapter-NSW/134460109969908

Prof Jinhong Yuan
IEEE NSW Joint SP/COM/OE Chapter Chair

3.2 Power and Energy Chapter (PES)

The NSW Power and Energy Chapter of the IEEE, in conjunction with the School of Electrical Engineering and Telecommunications at the University of New South Wales held a two day short course on the applications of ATPDraw software to power system transients on September 15-16 at UNSW. The course was given by a visiting Professor at UNSW, Prof Mehdi Vakilian from Sharif University in Iran and by Dr Toan Phung of the School of EE&T at UNSW.

ATP is the Alternative Transient Program, a derivative of the EMTP (Electromagnetic Transients Program) software developed by the Bonneville Power Administration in USA and available free of cost to users as public domain software. As well as being used from power system transient analysis, EMTP can also be used for normal power system load flow and fault analysis. ATP is a version adapted for PC applications and ATPDraw includes a graphical interface to simplify programming and modeling procedures. The course was very successful in attracting 16 attendees from as far afield as Karratha in WA and provided a very useful hands-on overview of the techniques of application to power system. Attendees were able to use their own laptops to perform analyses as presented by the lecturers. Ashok Parsotam, a member of Ausgrid's Network Earthing consulting group in Newcastle gave an outline of a number of practical applications of the software that he has used in his work.

Toan Phung is the Australian convener of the EMTP/ATP Users' Group and issues the software to prospective users. He can be contacted at toan.phung@unsw.edu.au.
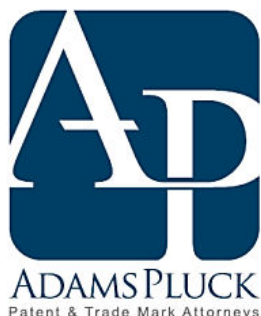
4. Technical Meetings & Conferences

All members are cordially invited to attend these joint lectures with the Engineers Australia (EA), IEEE and IET. These joint lectures will be held at 6.00 pm (with light refreshments from 5:30pm) at the EA, 8 Thomas Street, Chatswood, NSW, unless otherwise stated.

All members should check the latest updates of the Meetings & Conferences a couple of days prior to the actual date at http://www.engineersaustralia.org.au/events/events_home.cfm to prevent any potential disappointment due to last minute changes.

Date	Event/Meeting/Conference	Speaker	Host	Contact	Venue
10 Nov	Challenge in Wireless Comms	Prof Karu Esselle	IEEE	Graham Town	EA Auditorium
24 Nov	AGM and Student Presentation	Paul Branchfield	EA	Mai	EA Auditorium
8 Dec	Cloud Computing	Prakash Subramanian	IET	Deon Rowley	EA Auditorium
9 Feb (2012)	RAMS - Railways	UTS Ravinda	EA	Gohulan	EA Auditorium
23 Feb (2012)	Geospatial Applications on Emergency Management	Land Dept.	IEEE	Bruce Poon	EA Auditorium

Advertising :- (please contact markomally@ieee.org for advertising enquiries)

5. IEEE NSW Section 2011 AGM and Dinner

Date: Friday, 25 November 2011

RSVP: Tuesday **15 November 2011** to Eddie Fong

Times: 6pm Chapter and Affinity Group AGM's
7pm NSW Section AGM
8pm NSW Section Dinner

Venue: Novotel Rockford, Darling Harbour
17 Little Pier Street, Sydney, Australia, 2000
e: http://www.novotel-pcr.com.au/novotel-darling-harbour/home.html
p: 8217 4000

Parking: $28 (see next page for map and directions)

IEEE will cover the cost of your dinner (partner included) for all registrations received before the RSVP date above. However, for any cancellations after 19 November 2011 a cost of $70 will be charged to your credit card.

Reservation Form

Name: ....Tel:……………………….……….

Membership No.: …………………………………

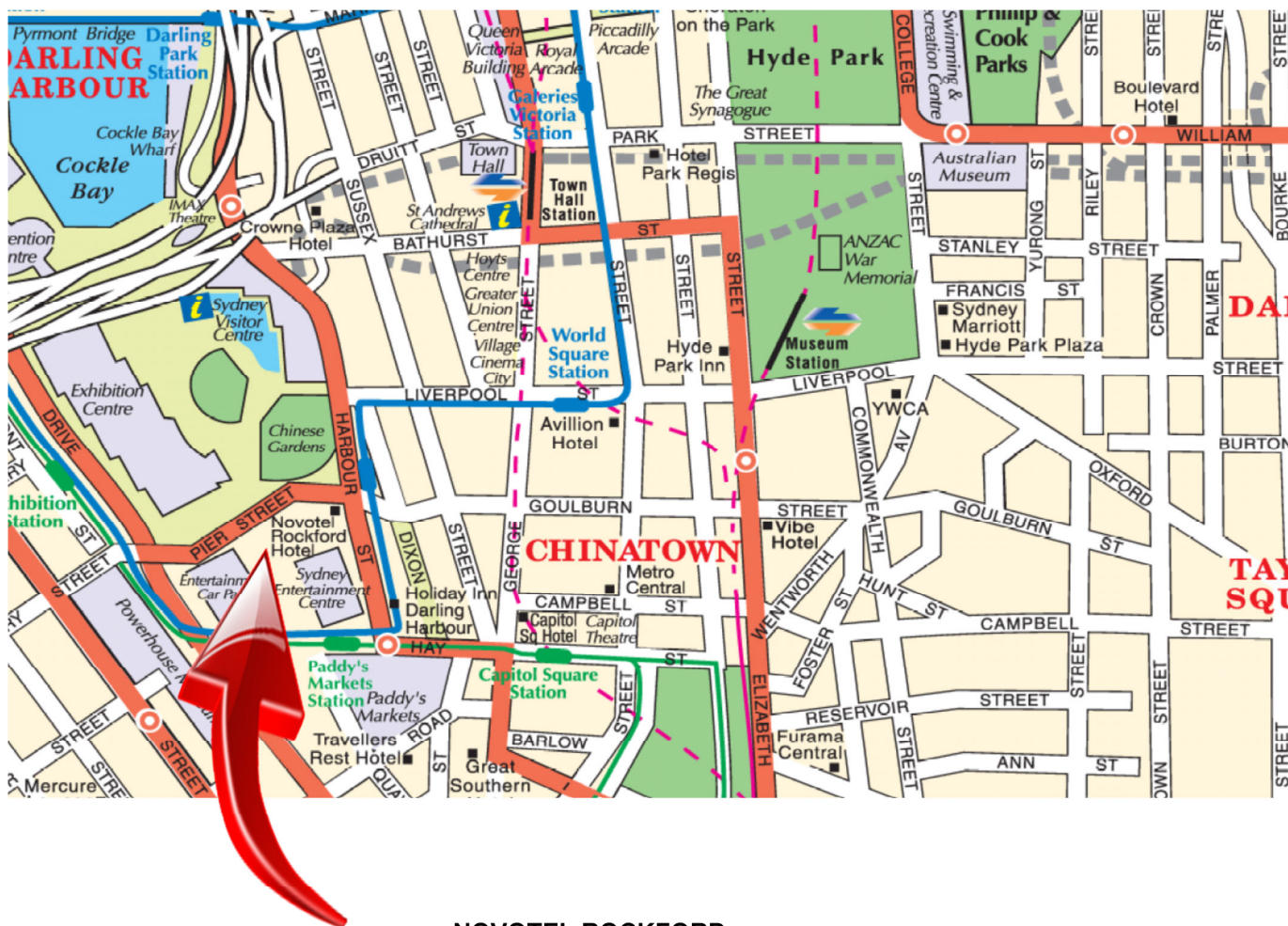Partner Attending: …………… (Yes/No as applicable)

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

Credit Card No.: ………………………………………….. (as mentioned above these details will only be used in the event of cancellation after 19 November 2011)
………………………………………………………………………………………………....

Kindly e-mail above completed form or phone through your reservation by 15 November 2011 to Eddie Fong: eddiefong@ieee.org or Phone: 0413777511

5. IEEE NSW Section 2011 AGM and Dinner (Cont.)

NOVOTEL ROCKFORD

Parking Instructions:

To access the car park from the hotel ** **5 left hand turns**

- Turn left as you exit the hotel
- Turn left at the set of lights outside the hotel
- Veer left off the bridge
- At the roundabout turn left
- Turn left at the Wilson Carpark also known as the Entertainment Centre Carpark

See Wilson website for further information http://www.wilsonparking.com.au/go/wilson-car-parks/nsw/entertainment#