

Welcome Message from Section Chair

Dear Members,

2006 is quickly moving into half time. In the past months, we have witnessed "players" from the section, chapters, affiliated groups and student branches working hard on the field. We can say that we have scored a few "goals" and we look forward to score a few more in the coming months.

Well, so much for the football talk due to the World Cup.

In a related issue, an article by the Secretary General of the United Nations, Mr Kofi Annan ("Football envy at the UN", *The Guardian*, 12 June 2006) lamented that "The World Cup makes us at the UN green with envy." He sees World Cup as "a truly global game, played by every country, every race and religion", "competition takes place on a level playing field, where every country has a chance to participate on equal terms", "illustrates the benefits of cross-benefits of cross-pollination between people and countries", and "the World Cup is an event in which we see goals being reached".

A remark raised in my heart, "Is he talking about the IEEE?"

Let me refresh some facts about IEEE. As a non-profit organization, we are the world's leading professional association for the advancement of technology. We have 311 sections in 150 countries with over 365,000 members. Compared to UN and FIFA, the numbers of member countries are 191 and 207, respectively. IEEE is represented locally in over three quarters of all the countries in the world and I believe our members can be found in every nation of the world.

IEEE's vision and mission are: "To advance global prosperity by fostering technological innovation, enabling members' careers and promoting community worldwide", and, "to promote the engineering process of creating, developing, integrating, sharing, and applying knowledge about electro and information technologies and sciences for the benefit of humanity and the profession." With respect to Mr Kofi Annan's wish list, we can say that the IEEE is already producing "benefits of cross-pollination between people and countries" through collaboration, conferences and publications.

In terms of the "level playing field" and "every country has a chance to participate on equal terms", IEEE Standards is already fulfilling this objective - "The IEEE is a leading developer of standards that underpin many of today's technologies. Our standards are developed in a unique

environment that builds consensus in an open process based on input from all interested parties." We can ask a simple question, "How many WLAN's in the world are based on the IEEE 802.11 standard?" This truly demonstrates the equal opportunity provided by technology and standards developed from the IEEE community.

Finally, on "Goals are being reached", this was the exact question that we have asked ourselves at our team-building workshop. The goals that were set for the committee members are:

- Meet the job descriptions of the position,
- Achieve RAB Strategic Goals,
- Fulfill IEEE's vision and Mission.

To this end, I am pleased to inform you that we have achieved the followings in the past months:

- I attended the Region 10 meeting at Chiang Mai, Thailand at the end of March. I proposed and it was accepted that Perth will host the 2007 Region 10 Executive Committee meeting on 5 January 2007. This is going to be an excellent opportunity for the local members to network with committee members from the regional executive committee. I believe this scores a goal of inter-regional/sectional activity.
- Region 10 Strategic Planning Coordinator, Professor Lawrence Wong visited Perth on 24-27 June 2006. He conducted a strategic planning workshop for the Section, Chapters, Affiliated Groups and Student Branch officers on 25 June, as well as a technical seminar for the IEEE community and the public on 26 June. He spoke at the National Australian Screen Production Education and Research Association (ASPERA) and the National Academy Screen and Sound (NASS) conference at Murdoch University on 27 June. His visit was sponsored by Murdoch University and IEEE WA Section. This demonstrated another international and cross-boundary collaboration.
- For the first time, IEEE was invited to take part in the Careers and Education Expo at the Perth Convention Centre on 19-21 May 2006. This event was sponsored by ICTICC (ICT Industry Collaboration Centre) and IEEE has strongly promoted the ICT and the related engineering disciplines to

the visitors. This achieves our goal of promoting and reaching out to the wider communities and in particular the school children and their parents.

- Visiting Information Security Expert, Mr Prinya Hom-Anek, from ACIS Professional Development Centre, Thailand has given a most informative and interesting seminar on "Top Trends in Cyber-threats, Security & Privacy Concerns" on 8 May 2006. The seminar was well attended by over 40 people and generated much interest and questions in the topic and the demonstration. This was another international collaboration and cross-country activity which fulfils the spirit of IEEE.

The above highlights are just a glimpse of what I believe that have demonstrated global and cross-boundary activities fulfilling the vision and mission of IEEE. Of course, there are many other activities including DL visits, seminars, workshops and social events run by various technical chapters, student branches and affiliated groups. In addition, we also anticipate another successful Networking Forum jointly organized by the three student branches. They are only possible with the dedication and hard work by all the volunteers, organizers and supporters.

I hope you are excited about IEEE as much as the World Cup. I urge you to watch out for the IEEE E-Notice and the Section web site for upcoming events. Your continual support of IEEE will foster and build the true global community as achieved by the World Cup. The main difference is that you do not have to wait for four years as our events are held throughout the whole year!

With best regards,

Lance Fung
WA Section Chair

In this Issue...

- Two heads of engineering schools promoted to IEEE Senior Member.
- IEEE Prize Winners.
- For a limited time, try out the new "Expert Now IEEE" for free.
- Recent Activities from Computer Chapter.
- Do you know the IEEE code of ethics?
- And much, much more.

Senior Member Elevation

Congratulations to Gary Bundell and Keith Godfrey. Both have been promoted to the IEEE senior member grade in April 2006.

Gary is the Head of the Electrical, Electronic and Computer Engineering School at UWA.

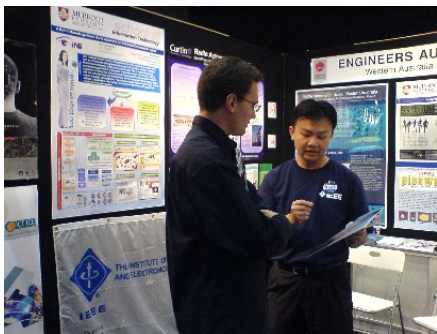
Keith appears in this issue's **Meet Our Members**.

Meet Our Members



Keith Godfrey is the Dean of Engineering and Head of School of Electrical, Energy and Process Engineering at Murdoch University. Keith graduated from The University of Western Australia in 1988 and lectured there until 2000, establishing the Engineering Summer Camps for high school students and an electronics programme that was used by 120 high schools around Australia. He moved to Europe in 2000 and worked in industry for five years as a technical lead and project manager for meteorological telemetry systems across the globe, completing projects in the Netherlands, Yemen, Belgium, Hungary, Spain, the Canary Islands and Brunei. He returned to Perth in 2005 with his wife and young family to take up an academic position at Murdoch University.

Career and Education Expo @ Perth Convention Centre, 19-21 May 2006



Kevin Wong (right) representing IEEE at the Expo.



"TMI, CYO, IMHO" poster - Too Much Information, See You Online, In My Humble Opinion.

IEEE Prizes

Edith Cowan University

Congratulations to James Papanastasiou, who has won the IEEE prize at Edith Cowan University. The prize, presented by Douglas Chai at the ECU prize-giving ceremony on 26 March 2006, was awarded to the student who achieved the highest mark in the unit ENS3251 Digital Signal Processing.



James Papanastasiou (right) was the ECU winner of the IEEE Prize.

Murdoch University

The IEEE prize at Murdoch University was presented by Kevin Wong at the Division of Arts Award Ceremony in Murdoch University on 29 March 2006. It was awarded to the student who achieved the best research project in the unit ICT219 Intelligent Systems. This year the prize went to Majed Khalid Fleyfel – congratulations.



Majed Khalid Fleyfel (left) was the Murdoch University winner of the IEEE Prize.

Curtin University of Technology

Robert Moore was the IEEE prize winner at Curtin University. This prize was awarded to the student who attained the highest aggregate in the second year unit Electrical Circuits 203, and was presented by Valerie Maxville at the Faculty Prize-Giving Ceremony at Curtin.

University of Western Australia

The IEEE Power Engineering Society WA Chapter Prize recipient was Gabriel Khaw, who has achieved the highest mark in the unit Power and Machines 332. The prize was presented by Harry McDonald at the UWA Faculty of Engineering, Computing and Mathematics Award night, held on 30 May 2006.

Continuing Education and "Expert Now IEEE"

As a member of Continuing Professional Education Committee (CPEC), I attended a joint meeting of CPEC, Sections Outreach Committee (SEOC) and Societies Outreach Committee (SOOC) in Newark, New Jersey, in May 2006. All three are standing committees of the Education Activities Board (EAB).



The mission of CPEC is to identify and serve the educational needs of working professionals by being the resource of choice for quality educational products and services, while SEOC and SOOC aim to facilitate greater linkage between EAB and sections/technical societies where appropriate.

During the meeting we discussed at length the annual plan of activities of each committee, and a new initiative being developed by the IEEE, which is currently on free (limited access) trial for members, and will be fully available to members to access for a fee in September 2006.

FREE TRIAL ACCESS TO "EXPERT NOW IEEE"

The initiative, Expert Now IEEE, consist of on-line learning modules of approximately one hour each in duration, covering a wide range of topics, designed and provided by the experts in the field. IEEE staff and SEOC are developing models under which sections can utilise Expert Now IEEE as a tool for membership recruitment/awareness functions.

If you are interested in the Expert Now IEEE trial, you can go to the following URL to find out more:

www.ieee.org/go/ExpertNowIEEEtrial

Helene Fung

WA Chapter of the IEEE Computer Society

The First Three CS Seminars of 2006 Were Held in April and May 2006

Did you know that you can use your camera phone as a barcode reader? This concept was presented by Dr Douglas Chai in April 2006. We had two more speakers in May: Mr Prinya Hom-aneek, who came from Thailand, visited us and presented a seminar on cyber-threats, and Dr Ashley Aitken gave a presentation on podcasting.



Date: 13 April 2006 **Venue:** Murdoch Univ, Murdoch
Topic: Using your mobile phone as a barcode reader
Presenter: Douglas Chai, Director of the Visual Information Processing Research Group, Edith Cowan University



Date: 8 May 2006 **Venue:** Murdoch Univ, Murdoch
Topic: Top trends in cyber-threats, security and privacy concerns
Presenter: Prinya Hom-aneek, President and Founder of ACIS Professional Center, Bangkok, Thailand



Date: 31 May 2006 **Venue:** Curtin Univ, Bentley
Topic: The infrastructure and implications of podcasting
Presenter: Ashley M Aitken, Managing Director and Co-Founder of Running Code Productions, Perth

We, at the CS committee, will continue to bring interesting technical activities for our local members. These activities also present a good networking opportunity for our members.

Join the Computer Society Today

The IEEE Computer Society is celebrating its 60th anniversary this year. There is no better time to join the society than now! With nearly 100,000 members, it is the world's leading organization of computer professionals. The IEEE Computer Society was founded back in 1946. It has now become the largest of the 39 technical societies in the IEEE. As soon as you become a member, you will straight away enjoy the vast benefits in areas such as career development, networking and technical information. For example:



- FREE online access to 300 computing and IT books
- FREE e-mail alias of you@computer.org
- FREE online access to 800 distance learning course modules. Topics include Java, Cisco, Microsoft, project management, security, and more
- Discounts on certification exam and prep course for software professionals

How Can We Help You?

Do you want to get involve in serving the IEEE Computer Society? Know a great topic for a seminar? Or, have something interesting that you would like to share?

We would like to hear from you. Simple send an email to me at k.wong@murdoch.edu.au

Kevin Wong
Computer Chapter Chair

Professional Societies Information Session @ UWA

The joint seminar, presented by Valerie Maxville (IEEE), Ryan Jenner (IET) and Kaye De Pardo (EA), was held on 23 May 2006 in UWA followed by an informal session of pizza and drinks.

This event was attended by 54 students. Most attendees were unaware of the IEEE and IET, and therefore this seminar was an excellent opportunity for these organisations to reach out and promote the services and opportunities on offer to students.

The Chair of IEEE UWA Student Branch, Timothy Wong, did an outstanding job of co-ordinating this successful event.

Jasmine Henry

Asset Management

On 10 May 2006, the IEEE PES/PELS Chapter committee in association with the Joint Electrical Electronic Papers committee invited guest presenter Warren Rigelsford to give a talk on the Plant Asset Management System implemented by Meridian Energy Limited, New Zealand's largest Electricity Generator.

Warren Rigelsford, Director of Matrikon Pty Ltd, discussed how Matrikon worked closely with Meridian Energy to design, develop and implement the Plant Asset Management (PAM) System that allows Meridian to more effectively manage their assets - with phase 1 being based on transformer asset management. PAM is a predictive maintenance package, which intercepts and processes data derived from condition monitoring of major equipment on the power system. PAM collates and summarizes data in such a

way that the condition of the assets becomes clear to the user through visualization concepts. The visualization concepts focus attention on assets at greatest risk. PAM applies rigor to condition monitoring data and presents predictive maintenance information to users in such a way that impending problems are not hidden in volumes of maintenance data.

The event proved to be successful, with a turnout of 45 professional colleagues that had an opportunity to elaborate on the topic of Asset Management with Warren after the presentation.

Vi Nyugen

What Do You Think?

Send your letter to the editor at douglas.chai@ieee.org

Professional Etiquette

On 3 May 2006, Graduates Of the Last Decade (GOLD) Group held a seminar on professional etiquette at the Telstra Theatre. We have invited back a really popular guest speaker that we had just over a year ago to address a really important aspect of professional life that usually isn't taught with any engineering course at universities: professional etiquette.

The speaker, Natalia Josephs was a fashion model and performing musician before founding her own consulting and training company. Her exposure and experience travelling the world makes her well-qualified to speak about the importance of etiquette and to point out the potential pitfalls to recent graduates. The seminar was well-attended by approximately 30 people.

Helene Fung
GOLD Affiliated Group Chair

UWA Student Branch

This semester has come and gone with a number of significant achievements within our branch.

There was a successful site visit to the Main Roads Western Australia traffic operations centre organized by Zhen Xu, a long serving member of our branch committee. It was well attended and regarded as interesting and educational by those who attended.

Xing Guo, a general committee member will be representing our branch at the Region 10 Student Congress in Beijing later this year in July. We extend our best wishes and regards with his involvement in this event.

This year's student networking forum is expected to be bigger and better than before. It will be held on Wednesday 16 August 2006 at the Technology Park function centre. The initial response from companies has been promising.

A seminar with speakers from the IEEE, IET and EA was held in the Blakers Lecture Theatre on Tuesday 23 May 2006. This event was well attended by interested undergraduates ranging from first to final year students. It was followed by a number of enquiries about membership to these organisations and positive feedback was received about the event.

Next semester there will be similar activities planned alongside engineering week and the student networking forum. Finally, I would like to take this opportunity to thank my branch committee members and our branch counsellor, Dr Jasmine Henry for their commitment and assistance in the running of our day to day operations and activities. Without their help and support our branch would not have been as successful.

Timothy Wong
UWA Student Branch Chair

Join IEEE

Know someone who would like to join??

It's easy, just to go
<http://www.ieee.org/join>

IEEE Code of Ethics

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

1. to accept responsibility in making decisions consistent with the safety, health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;
2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
3. to be honest and realistic in stating claims or estimates based on available data;
4. to reject bribery in all its forms;
5. to improve the understanding of technology, its appropriate application, and potential consequences;
6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;
7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;
8. to treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;
9. to avoid injuring others, their property, reputation, or employment by false or malicious action;
10. to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

Ha Ha

Story #3 – Four Engineers

This is a story about four engineers: a mechanical, a chemical, an electrical and a computer engineer.

They were travelling in a car when, suddenly, the car stopped.

"Sounds to me as if the pistons have seized. We'll have to strip down the engine before we can get the car working again." said the mechanical engineer.

"Well," said the chemical engineer, "it sounded to me as if the fuel might be contaminated. I think we should clean out the fuel system."

"I think it might be a grounding problem, or may be a faulty plug wire." the electrical engineer added.

All three turned to the computer engineer who had so far said nothing. "Well, what do you think?" they asked.

He replied, "why don't we close all the windows, get out, get back in, open the windows again, and may be it will work!"

Contributors

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* LANCE FUNG *

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* VALERIE MAXVILLE *

* HARRY McDONALD *

* VI NGUYEN *

* KEVIN WONG *

* TIMOTHY WONG *

From the Editor's Desk

Greetings, fellow IEEE members. I hope you have enjoyed reading this – July 2006 – issue of the e-Wavelet.

I thank the above contributors for their timely submission of articles and information used in this issue.

The next issue will be out in October 2006, and I welcome your input.



Douglas Chai
Newsletter Editor

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