MARCH 2010

GOLDRush

The quarterly newsletter of IEEE GOLD for young professionals

IN THIS ISSUE

HIGHLIGHTS

WELCOME FROM THE 2010 MGA GOLD CHAIR

William Sommerville

Dear IEEE GOLD Members,

The last few months have been marked by two devastating earthquakes, one in Haiti on January 12 and one in Chile on February 27. The images from these disasters are a sobering reminder of the frailty of civilization in the face of natural events. The toll is still rising, with well over 200,000 of our friends and colleagues fatefully departed and millions of people without homes. People all over the world have sent money and supplies to help stabilize the situation and the recovery effort will take many years.

Perhaps you have seen or heard the IEEE tagline, "Advancing Technology for Humanity". The phrase can mean a lot of things to different people, and the power of it comes when you stop to consider the individual people who make up humanity. Technical professionals in IEEE are advancing technology for the people in Haiti and Chile who are even now desperately looking for their loved ones. We are advancing technology for our parents who are at risk of heart disease and cancer. We are advancing technology so we can send a text message saying, "It's a girl!" to everyone we know when our first child is born.

The articles in this edition of GOLDRush illustrate the huge variety of ways that we as young professionals can positively affect the lives of the people around us. There is an article describing the use of radio-wave induced ultrasounds for medical imaging that could improve detection of diseases. In another article, Dr. Nikolaos Mavridis describes how he put in place the first interactive robotics and media laboratory in the Arab world. Besides being inspirational, these articles show us that we each have the duty and the privilege to apply our knowledge and skills to benefit humanity.

Many people reading this have been affected by the global economic downturn, either losing their jobs or having their pay and

"The IEEE tagline, 'Advancing Technology for Humanity' ... can mean a lot of things to different people"

benefits reduced. As graduates of the last decade (GOLD) members, we are more aware than any previous generation of the global economy and the huge shifts in the job markets and the skill sets required for success. Many of us are thinking about how we can stay competitive on these dynamic times and build lasting careers in fields that we enjoy. We have probably browsed job sites, including the IEEE Job Site, and poured over the job descriptions wondering whether we would be a good fit for this entry level position or that senior level position. I hope that each of us can make the best of our associations with the IEEE to further our personal and career goals.

IEEE GOLD members are unquestionably professionals that are dedicated to their field. We have vast resources at our fingertips to remain technically current, build up our soft skills, and network with other professionals. We can browse the IEEE website and call upon our colleagues for the help and information we need to stay on top of our game. Most importantly, we realize that careers are not built in a day, and it can take long term commitments and partnerships to build success. This GOLDRush newsletter is designed with these thoughts in mind and I sincerely hope that you find information here that is both interesting and useful.

In this edition of GOLDRush, you will find articles and columns that will help you gain perspective on technology in the world and ways you can shape your career. The article on intellectual property is something especially useful for people who are changing careers, and can make a big difference if you decide to pursue an entrepreneurial path. We are always striving to improve the depth and breadth of content relevant to our young professionals and graduate student members. Please email gold@ieee.org if you have any feedback or comments about IEEE GOLD.

Best wishes,
William Sommerville

Copyright Microsoft

Editorial

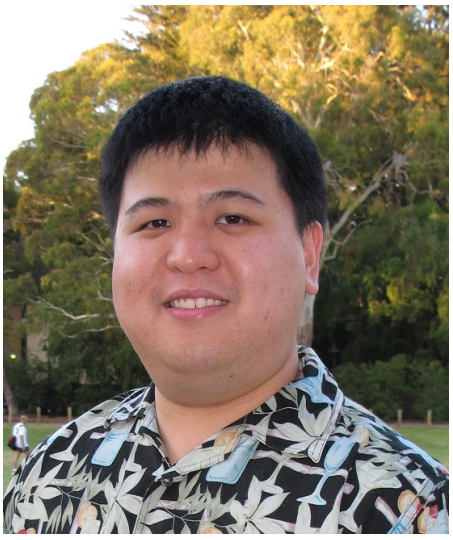
By Timothy Wong, IEEE GOLDRush Editor

Welcome to the March 2010 edition of IEEE GOLDRush. It is my pleasure to be taking on the role of Editor in Chief from George Gordon and welcoming our GOLDRush 2010 team which is comprised of dedicated IEEE members from a diverse range of backgrounds and all corners of the world. As young professionals we all hold the key to the future of the IEEE and profession. Change is one of the inevitable aspects of our professional and personal lives. I was reminiscing on George's last editorial which talked about the very aspect of Change. Perhaps one of the biggest changes affecting many people around the world is the global financial crisis. Many young professionals have not necessarily seen a global economic downturn or even a local recession of this magnitude before. Although some people may not see an end in sight to the turmoil this has created, let me assure you that there is a hope and greater resilience in times like this. I encourage you to take this opportunity to reflect and reorient the path you are taking your career and life as necessary.

"GOLDRush will become a leading publication for young technology professionals..."

Young professionals of today have much to look forward to. Gone are the days where a professional would stay in the same job for most of their life. These days it is normal to have several job changes throughout your working life and even changes in careers. In fact if you were to be looking into the future, there are many jobs that will exist in 10 years time which currently do not exist. By all means, please take the chance to explore the exciting world and make the most of life and the opportunities which are available to you.

Before I continue on, I should introduce myself. I currently live in and grew up in a city



called Perth which is located in Western Australia. I graduated from the University of Western Australia with degrees in Bachelor of Electrical and Electronics Engineering and Bachelor of Computer Science and currently work at a company called Horizon Power which deals with Sustainable Energy Solutions. My involvement in IEEE started back in 2005 at the University of Western Australia IEEE Student Branch as treasurer where I eventually took on the role of Chairperson. I spent the Fall semester in 2006 studying in the USA at Purdue University where I liaised with the Purdue IEEE Student Branch and competed for them in the Region 4 Ethics Competition.

As you may be aware, the IEEE tagline is "Advancing Technology for Humanity". Recently, we have unfortunately seen the devastation caused by natural disasters such as the recent earthquakes in Chile and Haiti. This is an opportunity where we as a worldwide community can gather to collaborate and help an urgent humanitarian cause. I encourage you to assist wherever you can and to explore the possibilities in your world to see how you might be able to advance the cause of humanity.

Last but not least, I would like to commend George and the past IEEE GOLDRush editors and their assistants who have all done a wonderful job in building up this publication to result in its current standard. George won the 2009 MGA GOLD Achievement award for 'For exceptional leadership and outstanding contributions to the development of the IEEE GOLDRush Newsletter.' This award is very well deserved by George. He has left behind a legacy which I wish to carry on and hope that you as readers will continue to do the same. We wish George all the very best with his future endeavours. I share George's vision that "GOLDRush will be-come a leading publication for young technology professionals. It will be platform for young professionals to communicate with one another, learn new skills and make the world a better place through activities such as humanitarian initiatives."

2010 brings many new opportunities for us all within the IEEE community and the world. I wish you all the best for the up and coming new year.

If you have any suggestions or comments on the content or direction of IEEE GOLDRush, please send your feedback to timothy.wong@ieee.org. We rely on readers like you to provide us with feedback on your thoughts so we can continue to deliver quality content which is relevant to our readers.

All the best for 2010,
Timothy Wong
2010 IEEE GOLDRush Editor In Chief

READERS' FORUM

Your questions and opinions

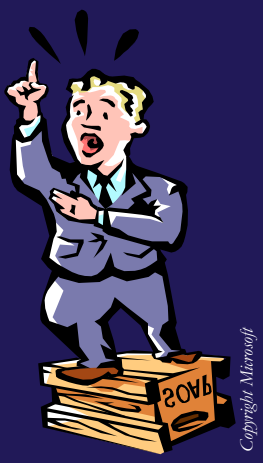
Through the eyes of a Young Engineer

One day I was walking through some scenic mountains and little hills, across a river valley and past a spectacular block of transmission towers. I starting thinking about the how the world was seen through the eyes of a young engineer. I began to ponder, how do you look after these transmission towers? There must be a dedicated group of young professional engineering staff who look forward to working on these lands and terrain. If you are ever fortunate enough to encounter young engineers who risk their lives at high altitude to maintain our power facilities, remember to encourage and thank them for the work they do, so that our lights may stay on.

We take many things for granted which Young Engineers provide for, such as the warmth and security of light to guide us home on the otherwise dark streets at night, the comfort of air-conditioning and all of the modern conveniences which rely on this very important element known as electricity. Very few people realise how much work goes into generating and transmitting power. Quite often, electricity is transmitted over very long distances sometimes through harsh terrain and climate conditions to reach the safety of our own homes. Perhaps for the Young Engineers I saw in the mountains working away, the Transmission Tower is the heart and soul of what could be a lifetime worth of work, nurturing each tower like their children which will develop and grow under their care and nurture.

So perhaps for some Young Engineers, their lives often involve being 60 meters high in the air one day and then back on safe and dry ground living an ordinary life like the rest of society. Some may be single or married with children. Some Young Engineers work long hours and over vast distances sacrificing their lifestyle for the common good of society. We salute these Young Engineers for the work and service they provide.

COKI HORNG-JI



Copyright Microsoft

Express your opinions on GOLDRush articles and ask questions to the authors by submitting a letter to the GOLDRush Readers' Forum. Send your submissions to GOLDRush@ieee.org before 7 May 2010 for inclusion in the June 2010 edition. Submissions must be no more than 200 words and may be edited if necessary. We look forward to hearing your thoughts!

Getting the right experience: pro-bono work

It has been predicted that the global economic downturn will have its biggest impact on those leaving fulltime education for the first time, particularly graduates who will be highly qualified, but under experienced. However, a little self-help is all they need to overcome it.

My choice of degree was based on belief that education should be vocational, which is why I chose the electronics engineering route of multimedia computing, which allowed me to get work experience in the field with a government funded scheme.

Many graduates face the problem of what to do after their degree, particularly as many are unable to get jobs. The solution is pro-bono work. This can include professional work for the private or third sectors for which you don't charge a fee, but which will give you the experience and confidence to apply for gainful employment or even start up your own firm.

That was the route I took. The pro-bono experience meant I was able to meet the requirements for professional qualifications from the BCS and IEEE and now, running an IT firm I co-founded I am gaining the managerial experience needed for further recognition in these organisations.

Graduates are often frustrated that employers tell them they do not have the experience and immediately think 'how am I supposed to get the experience if you won't give me the job?' Taking part in pro-bono work, maybe for a charity or small business, can be worth a lot to some employers and can often be done to fit around further study at graduate level.

JONATHAN BISHOP

INVITED ARTICLE

Will to Make a Difference

A will is one of the most important documents you will ever sign.

A skillfully crafted will:

- lets you direct who will receive the property you have accumulated over your lifetime (without a will, inflexible state rules decide who receives what)
- permits you to nominate who will handle your estate and/or serve as guardians of your children
- minimizes death taxes and other costs that deplete your assets
- can contain a trust providing financial security and money management for someone needing special assistance
- enables you to leave gifts that assist family, friends, and worthwhile causes, such as the IEEE Foundation

Executing a will is easy, inexpensive and the rewards are great, both in peace of mind and personal satisfaction.

The steps to obtain a will are as simple as 1-2-3:

1. Write out all the goals you want your will to accomplish.
2. Make an appointment with an attorney. If you do not have an attorney, ask a friend or relative to recommend one, or contact your local bar association.
3. Store your will in a safe place and examine it periodically to ensure that it is current with your family needs and personal desires.

When planning your will, you may discover that you want to make a difference and leave a legacy in the form of a charitable contribution. Please consider the impact IEEE has had on your education, career and life.

There are several ways to include a bequest – gift by will – to the IEEE Foundation. Some IEEE members designate a specific dollar amount. Some bequeath a percentage of the "residue' - the amount remaining after paying all inheritances, debts and costs. Others make the bequest contingent (passing to us only if another beneficiary predeceases you) or in trust, providing income to your spouse or children before benefitting the IEEE Foundation. The IEEE Development Office can share more information about these options with you.

If you already have a will, great! Keep it up to date and when the time comes to make a change, a simple codicil (amendment) often is all that is needed. If you are considering a codicil, or are re-evaluating your will, please consider adding a bequest to the IEEE Foundation.

When you include the IEEE Foundation in your will, please share the good news with us by contacting the IEEE Development Office by telephone at +1 732 562 3860 or e-mail at donate@ieee.org. This helps us plan for the future and recognize your generosity during your lifetime by inviting you to join the IEEE Goldsmith Legacy League, our elite planned giving donor recognition group.

IEEE Goldsmith Legacy League is named in memory of Alfred N. and Gertrude Goldsmith whose planned gifts seeded the IEEE Foundation's ability to support the mission of the IEEE. Members of the IEEE Goldsmith Legacy League are Forever Generous. They are building tomorrow by making planned gifts that will benefit future generations. In recognition of their special commitment, members of the League receive a keepsake coin, certificate of membership, an invitation to attend the annual IEEE Honors Ceremony, the IEEE Foundation Focus newsletter, periodic updates on planned giving, as well as recognition in the annual Honor Roll of Donors and on the "Wall of Honor".

This article adapted from material provided by R&R Newkirk. It is not intended as legal advice. Consult your advisers.

As the philanthropic arm of IEEE, the IEEE Foundation cultivates relationships and resources to advance the IEEE core purpose to foster technological innovation and excellence for the benefit of humanity.

To fulfill its role, the IEEE Foundation awards grants to new and innovative projects and administers more than 125 donor designated funds that support a variety of educational, humanitarian, historical preservation, and peer recognition programs of IEEE.

Qualified under US Internal Revenue Code 501(c)(3), the IEEE Foundation is eligible to receive tax-deductible contributions in the United States. For other countries, please check with your local tax advisor regarding tax deductibility of charitable contributions. To learn more visit http://www.ieeefoundation.org.

MEMBER PROFILE

Lisa Lazareck

Career description:
I am a Canadian living abroad in the UK for almost seven years now – which means a lot of tea and chat about the weather! I was recently awarded my Doctorate of Philosophy (PhD) in electrical engineering from the University of Oxford (St John's College). My research project investigated the Obstructive Sleep Apnoea disorder by the processing of oxygen saturation signals for diagnostic purposes. I also have further degrees: Master of Science (MSc) and Bachelor of Science (BSc), both in electrical engineering from the University of Manitoba, Canada. Most recently, I got a job as a Research Assistant at the City eHealth Research Centre (CeRC) at the City University London, UK. I am working on the development of educational web games to teach children about science and hygiene. I love this post as it allows me to continue acting as an advocate of science and engineering education, an endeavour I have been involved in for many years.

I am an 11-year member of the IEEE and have been an elected and appointed volunteer for the Engineering in Medicine and Biology Society (EMBS) since 2003. I started my IEEE-EMBS involvement as a student at my undergraduate university (University of Manitoba, Canada), which had a very active IEEE Student Chapter. I was elected EMBS Student Representative (2004-2005), EMBS GOLD Representative (2006-2008), Chair of the EMBS Student Activities Committee (2009), a member of the IEEE.tv Advisory Board (2007 – present), and I am the current Co-Chair of Student Activities at the annual EMBS Conference in Buenos Aires, Argentina as well as the new lead in EMBS Membership Marketing.

Personal interests:
My personal interests include theatre, museums, art, reading, dancing, food, music, and travelling.

How has IEEE shaped your career?
I feel that, as my needs have changed over the years, IEEE has been an ever-changing resource for me to utilize. For example, through my biannual attendance at the EMBS Administrative Committee meeting and receipt of greater responsibilities within the Society, I developed soft skills suitable for the workplace including leadership, teamwork and communication. My ability and confidence in organizing events and public speaking have greatly improved. If I hadn't volunteered for the IEEE, I would not have had the opportunity to host "Zapped," a 2-hour television program on electricity and the human body for the Discovery Channel! I have further work for the Discovery Channel, this time, involving me getting struck by lightning while sitting in a car.

Words of advice for young professionals?
Make the most out of your IEEE membership! With every year of continued volunteering, I learn something new about the Institute that always proves useful - whether it be a new development (such as the updated IEEE Xplore search engine) or a program that IEEE already provides (such as the Mentoring Connection Program). Make the most out of your Society membership (s)! I really enjoy working with the researchers, professionals, and leaders of the EMB community world-wide. It is important to maintain these relationships in order to keep up-to-date with one's field of interest. The IEEE is a truly global network, and is most highly respected for its professionalism. I believe that if I hadn't been involved with the IEEE, I wouldn't have been hired by my current employer! Lastly, I would encourage all young professionals to get involved with your local community by attending monthly meetings, helping to organize speaker engagements, and educating the public about engineering. Build your home communities and make the most of your time!!

GOLD NEWS

From around the world

IEEE South Asian GOLD Clustering Program

By Visan Koshy Varghese (Coordinator, South Asian Gold Clustering Program)

Pictured: Visan Koshy Varghese taking awareness session for the IEEE Student leaders at IEEE LINK Camp, Kerala.

The IEEE GOLD South Asian GOLD Clustering Program (SAGCP) started its activities with a bang with its initial program at the R10 GOLD Congress held in Bangalore on 5th and 6th December 2009. This initiative has the vision that "South Asian GCP shall serve as a body uniting different GOLD Affinity groups, and further help in the sustainability of each GOLD Group, thus adding value to IEEE membership" and with the mission to "Act as a conjunctive body, ensemble the GOLD Groups coming under its geographical span and spread the value of IEEE through out its geographical span."

The session was attended by GOLD groups from Chennai, Bangalore, Kolkata and Hyderabad with support extended from Karachi and Lahore. The idea of SAGCP was warmly welcomed by all the GOLD groups and it was agreed with an equal voice that such initiatives would be necessary for the sustainability of GOLD group as well spread the importance of GOLD to upcoming graduates.

The ideas and thoughts that were discussed included:

1. Awareness of GOLD and its activities to students. The main reason why undergraduates/graduates (students) are not converting from IEEE Student Membership to IEEE Membership is because they are not aware of the activities of GOLD and its existence.

2. Formation of SAGCP through Yahoo/ Google groups - The group will help to share information on a common platform and if there are any events that are held it will be shared in this group.

3. Mentorship Program.

4. GOLD members should be part of the Student Activities group to create and maintain an association with the students and their needs.

5. Help newly formed GOLD groups.

6. SAGCP will be a good platform to strengthen the link between R10 and various GOLD groups.

7. Standing together on the same platform will help with the smooth transition of the GOLD committee and ensure the sustainability of GOLD groups.

8. The SAGCP can used as a platform to share good practices.

9. Having at least one online meeting in a month's time to make sure that activities are happening in each section and to get new ideas.

The actions which directly resulted from this meeting include:

1. Spread awareness of GOLD to Students - The GOLD groups are taking the initiative in going to various IEEE colleges and events where a number of colleges are attending and give an hour awareness session to students about its activities. As a part of this Mr. Visan Koshy Varghese had attended the IEEE LINK (Local Integrated Network of IEEE Kerala Students) camp held on 12th and 13th December 2009 at Kerala.

2. The first online meeting was held on 23rd January 2010.

3. SAGCP is planning to meet the IEEE Students of Lahore online during the IEEE week program to be held at Lahore.

STEP in Argentina Section

By Augusto José Herrera
(Graduate Student Member)

STEP is an acronym for *Student Transition & Elevation Partnership*, which is a program developed by IEEE to facilitate the transition from student member to young professional by introducing opportunities and benefits of IEEE membership at the start of the career.

The program has been developed with great success in many Regions and for the first time has been carried out in Argentina. The workshop was held on 17th December, in Cordoba City, with the participation of about 20 IEEE members, including student members in recent years or graduate student members for whom this program was developed. Overall, Student Branches were represented by Blas Pascal University, National Technological University – Córdoba Regional, Aeronautical University Institute and Cordoba National University which are all residents in Cordoba´s city.

Participants also included Ricardo Taborda, Vice President of Argentina Section, Pablo Recabarren, Susana Drudi, Orlando Micolini, President, Secretary and Treasurer of Cordoba Subsection, respectively, and Miguel Solinas and Carlos Bastos, past presidents of Cordoba Subsection, as well as academics and professionals from industry. Authorities of Engineering Specialists of Córdoba College (CIEC) were invited to join in the STEP program where they collaborated and offered its facilities to implement the program.

Pictured: Argentina Section and Cordoba Subsections officers, GOLD members and students members accompanied by authorities of Engineer's College.

Between the activities carried out, there were three lectures. Pablo Recabarren was responsible for the formal inauguration of the STEP program, where he thanked all attendees for their participation in the event, reflected on the Cordoba Subsection and its relationship to GOLD members and invited all attendees to join to participate in the activities to be conducted in 2010.

Pictured: Ricardo Taborda, Pablo Recabarren and Carlos Bartó, some officers of Argentina Section

Augusto Herrera, the 2010 GOLD Chair for the Argentina Section, explained the STEP program, their main goals, and encouraged all student members and graduate student members to remain actively involved in the development of IEEE professional activities after graduation, maintaining an active relationship with GOLD officers, Section and Branches in which they were volunteers. He further explained that the idea is to prepare an Action Plan involving recent graduates from all Branches of Argentina Section and raised the goal of bringing more GOLD activities for the next year (2010).

The last presentation was delivered by Ricardo Taborda, one of the more experienced IEEE members who shared his experiences in IEEE Sections and Subsections, inviting all attendees to continue adding to the IEEE GOLD activities that will continue to develop during the course of 2010.

At the completion of presentations, all attendees were provided with a dinner, followed by the presentation of awards and recognition to all members who worked during the course of 2009 in Cordoba Subsection and GOLD activities.

IEEE GOLD Tokyo Affinity Group

By Alex Fung (Secretary) and Yasuharu Oghoe (Chairperson) (Tokyo GOLD Affinity Group)

On 28th November 2009, the IEEE Tokyo GOLD Affinity Group jointly organized the "The 2nd Career Development Workshop for Young Students and Professionals" with the participation of IEEE Japan Council Women in Engineering (WIE), student branch of Tokyo Denki University, Tokyo University of Science, and Yokohama National University. The event had 50 attendees and was held in the Kanda campus of Tokyo Denki University.

With the success of the 1st Career Development Workshop, this workshop was organized as a complement to the previous one as many topics were not discussed. As with the previous workshop, we invited young professionals from different companies as facilitators and supporters to talk with students of both undergraduate and postgraduate levels. This career development workshop was opened to IEEE members as well as non-members to provide an opportunity to meet in person so that we could promote IEEE and GOLD to more students. In addition, personnel staff from companies also joined the workshop to answer some questions of the students.

At this workshop, topics included:

A. How to develop a good product.

B. Things you should learn during life as a student.

C. How to contribute to the company as an engineer.

D. What should be the image of an engineer?

E. Things the companies demand from you.

F. Job hunting for PhD students.

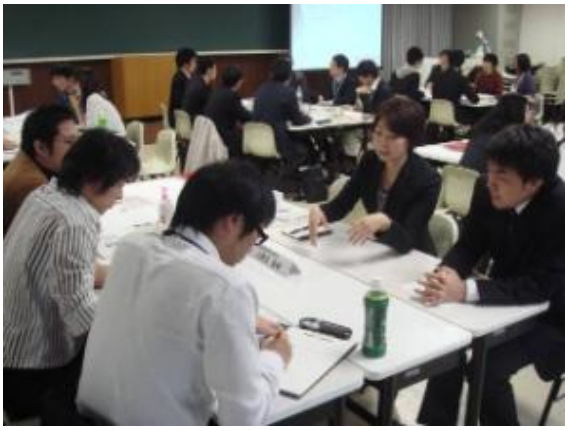
G. Job hunting for foreign students in Japan.

H. Thinking methods which are useful in all situations.

In group A, the idea of designing a mobile phone, which is known as one leading area in Japan, was discussed. As it is difficult to design a product which is suitable for all age groups, participants first focussed on the design for male and female in their twenties. Some unique ideas about needs of the generation were exchanged. The facilitator suggested reading more magazines in different areas to broaden the horizons in order to understand the needs of the market to inspire different ideas.

In group B, apart from the things which students should learn, participants also discussed about "what you should prepare for a job change" in case people decided to quit a company. While it is still not uncommon for a person to stay in one company during their lifetime in Japanese society, the younger generation in this workshop (including the facilitator) believe it is important to equip oneself for career change. It was concluded that it is important for students to equip themselves with the power to finish a job, power to change, and a broad perspective of their career options.

In group D, the facilitator discussed the image of an engineer from his own experience. He talked about the human relationship, profit vs morals, and the core of oneself. With regards to profit vs morals, it is the goal of a company to make profit. However the technologies can be sometimes immoral depending on the point of view taken, and this is forever a topic for debate.



Pictured: Group A discussion

Pictured: Group Summary Discussion

In group F and group G, a discussion about job hunting was held for two slightly special groups including, PhD students and foreign students. PhD students are known to have more narrow job choices, but there are different levels among the choices. PhD students should also exchange information with each other as information for them is limited. For foreign students in Japan, the facilitator pointed out that the competitors of foreign students are other foreign students. So if you can make a difference among the foreign students, it is likely that you can get the job opportunity successfully.

Afterwards a party was held where students could discuss with facilitators of the other groups while enjoying the food. Most participants enjoyed this workshop and believed that the time for the workshop was not enough. We are looking forward to the third workshop which will be held in June this year.

Pictured: Summary of discussion from each group

Comments on GOLD News? Write to our Readers' Forum at GOLDRush@ieee.org

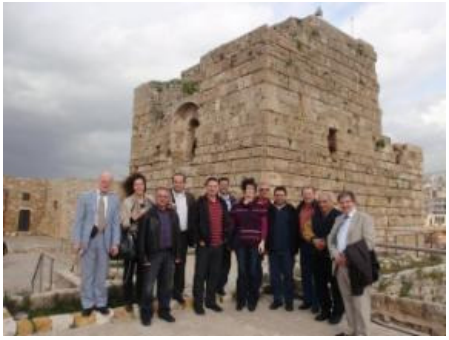
IEEE Region 8 Operating Committee Meeting

By Marc Chedid (Lebanon IEEE GOLD Affinity Group Treasurer)

The IEEE Region 8 Operating Committee Meeting was held between 22nd to 24th January 2010 and took place in Beirut, Lebanon. The OpCom members had a chance to meet with the IEEE officers of the Lebanon Section, the Chapter officers, the Student Branch officers and the GOLD officers at an event that was organized by the Section at the Movenpick Hotel.

The Lebanon Section Chair Dr. Elias Nassar welcomed the Operating Committee and gave the background and activities of his Section and the Region 8 Director, Dr. Jozef Modelski provided an overall presentation on IEEE and Region 8. This was followed by a technical presentation by Region 8 Past Director Jean-Gabriel Remy on Mobile Communications. A lively discussion followed with the Lebanon Section members asking various questions about IEEE and Region 8.

After the dinner gathering at the hotel, the GOLD Officers took the Region 8 Committee members for a night tour in the Downtown District of Beirut. After a walk in the streets of Beirut, all the delegates enjoyed a drink in one of the local bars of the capital,



which included a live band performance which added a nice touch to the atmosphere.

During the next two days the OpCom members had more contacts with the Lebanon Section.

The Lebanon Section was very hospitable and its members are very active, energetic and working hard for IEEE. It is no surprise that the Section has grown to more than 660 members in just a few years of existence.

IEEE GOLD Australia and New Zealand Clustering Virtual Meeting

By Timothy Wong (2008 Region 10 GOLD Summit Leader)

The first Australia and New Zealand Clustering meeting was held on 27th September 2009 via teleconference. A virtual teleconferencing tool called DimDim was chosen and used because of its ability to provide teleconferencing, presentation sharing and whiteboard facilities for collaborative discussion. Prior to this meeting an information manual was provided to the participants along with a questionnaire to place them into the correct mode of thinking.

This meeting was chaired by Timothy Wong and the participants of this meeting included Adrian Pais, the 2009 MGA GOLD Chair, Bobby Yau from GOLD South Australia , Robert Ellen and Roelof Swanepoel from GOLD Queensland, Helene Fung, the Region 10 GOLD Coordinator, Abhinabh Duffadar from GOLD Auckland and Vaughn Clarkson, the Australia Council Chair.

The concept of clustering was first raised at the 2008 GOLD Summit which was held in Quebec City. One of the ideas underpinning clustering is the need to have collaboration between groups where there is a logical inclination to do so. For instance, Australia and New Zealand was chosen as a cluster because of its similar geographical location, political and socio-economic status.

During the course of this teleconference, introductions were provided from each participant followed by a discussion of best practices and knowledge sharing. It was noted that many groups had similar problems and many different and creative ways to solve them. Since the introduction of this program, there has been the formation of one new GOLD affinity group within the cluster which will be a welcome addition to this group.

Overall this teleconference was a success and provides a pre-cursor to future collaboration and discussion. An online discussion board was set up to facilitate ongoing collaboration which will continue in 2010.

Comments on GOLD News? Write to our Readers' Forum at GOLDRush@ieee.org

2009 Region 10 IEEE GOLD Congress

By Gowtham Prasad K N (2009 IEEE GOLD Congress Organizing Chairman and Bangalore GOLD Affinity Group Past Chair)

On December 5th and 6th 2009 the IEEE Bangalore Section hosted the "IEEE Region 10 GOLD Congress" at Bangalore, India at the Dayananda Sagar College of Engineering. The objective of the event was "To address the Challenges of Young Professionals & Next Generation Leaders". The event was organized by the IEEE Bangalore Section in association with the IEEE GOLD Affinity group of Bangalore, supported and co-sponsored by Region 10 GOLD and PRDC, India, and supported by IEEE India Council. The Event mainly covered four themes: Innovation, Urban Reforms / Human Values, Technology Trends & Career growth and also included the first meeting of South Asian GOLD Clustering Program (SAGCP).

The event was attended by over 150 delegates from 4 GOLD groups under Region 10, with virtual participation from 3 GOLD Groups in Region 10. The event was inaugurated by Dr. Praveen Vishakantaiah, President of, Intel India and presided over by Professor Narahari on behalf of Mr. Ramakrishna, Chairman, IEEE Bangalore Section. Ms. Helene Fung, the Region 10 GOLD Coordinator greeted and conveyed a warm message through a video. The function was graced by Mr. Gowtham Prasad, Organizing Chairman, IEEE GOLD Congress 2009 and Ex-Chairman, IEEE GOLD Bangalore, Mr. Vishnu Makkapati, Convener, IEEE GOLD Congress 2009, Mr. Akshay Darbari, Chairman, IEEE GOLD Bangalore, Mr. R. Janardhan, Sr. Executive Vice-President, DSI, Sr. Members from IEEE Bangalore Section and IEEE GOLD Bangalore EXECOM members.

The event was a good amalgam of highly motivating talks, networking opportunities for GOLD and Student delegates, knowledge sharing and loads of fun.

Day One

Day One of this event started with a pre-conference tutorial on "Converting ideas into Ventures" presented by Professor Suresh Bhagavatula from the NS Raghavan Centre for Entrepreneurial Learning. This was followed by a tea break and Inaugural function. Other presentations during the day included:

- Innovation: A business necessity by Dr. Praveen Vishakantaiah, President of Intel India
- A high energy and fun filled team building Session by Dr. Shalini Chandra, HR Consultant
- Innovation: An IBM Perspective by Dr. Raghuram Krishnapuram, Senior Manager of Services Information & Analytics IBM India Research Laboratory
- Social Capital - the essence of a Democracy by Mr. Ramesh Ramanathan
- Technology Trends in Network Computing by Mr. Anil Valluri, Vice -President and MD, Sun Microsystems India
- Converged Infrastructure for Cloud Computing and Data Centers by Dr. Dinakar Sitaram, CTO of HP STSD India

The talks triggered many thoughts and discussions in the minds of attendees. This session was followed by the first meeting of South Asian GOLD Clustering Program (SAGCP). This meeting saw participation from leaders of 4 GOLD groups under Region 10 (Chennai, Bangalore, Hyderabad, and Calcutta GOLD groups) and virtual participation from leaders of 2 GOLD Groups in Pakistan. Interested final year student members were also invited to attend the proceedings. This was chaired by Mr. Visan Koshy Varghese, Coordinator South Asian GOLD Clustering Program. Different GOLD groups shared the various events they have conducted and best practices that have worked for them. The meeting acted as a stepping stone for the better collaboration of GOLD Groups in South Asia.

Pictured: GOLD Congress Cultural Show

An exciting and colorful mood had set in around the open air theater in the cool evening of December. School children presented a traditional Bharathanatyam performance. This was followed by various performances by Conference attendees which included songs to dances to drums. A delicious Banquet followed to treat all the conference attendees.

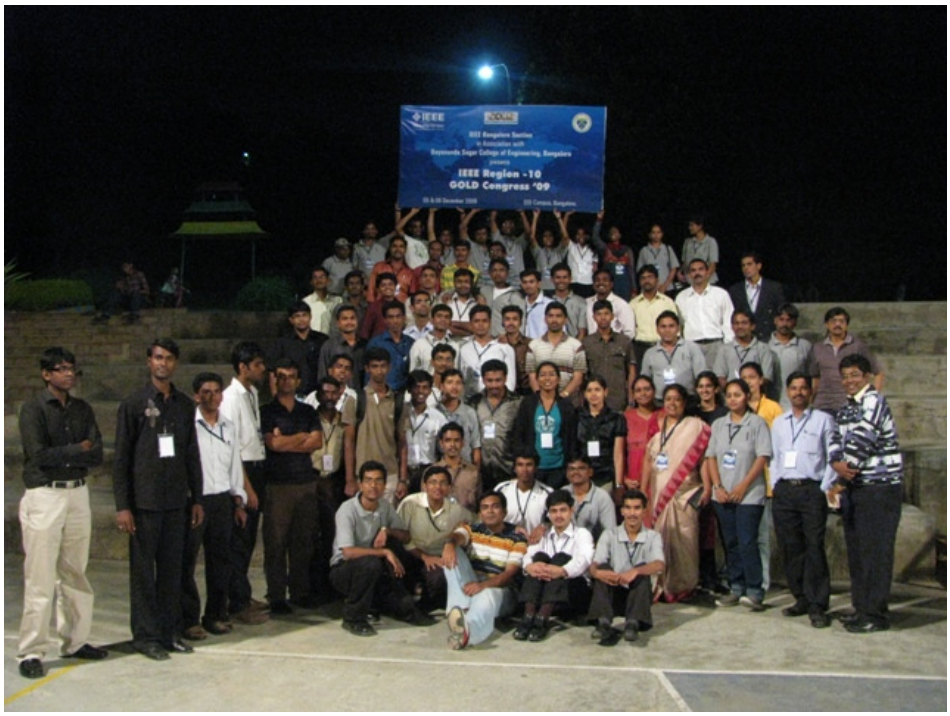
Day Two

Bright sunlight shone over the campus of Dayananda Sagar College of Engineering looking forward to the 2nd day of the GOLD Congress. The main themes for this day included professional development leadership, careers and entrepreneurship among relevant topics for Young Professionals. The presentations for day two included:

- Career Growth by Mr. T. V. Mohandas Pai, Director & Head of Infosys Leadership Institute and Education & Research
- Vinayaka - A role model for true leadership by Dr. V. Prithviraj, Advocate, High Court of Orissa
- My Entrepreneurial experiences in building & rebuilding Microland by Mr. Pradeep Kar, Founder, Chairman & Managing Director of Microland
- Corporate Entrepreneur is not an Oxymoron by Dr. Vishy Poosala , Head of Bell Labs India

- Entrepreneurship & Venture Capital by Mr. Parag Dhol, Director, Inventus Capital Partners
- Autonomic systems in Business & Industry by Mr. T. R. Gopalakrishnan Nair , Director, Dayananda Sagar Institutions, Bangalore
- India Market Growth Opportunity: Leapfrog to Lead Technology Infrastructure by Dr. Biswadip (Bobby) Mitra, President & MD, Texas Instruments, India.

This was followed by a formal valedictory Function. Mr. Hitesh Mehta, Secretary of the IEEE Bangalore Section thanked all the volunteers, sponsors, GOLD Congress organizing committee, volunteers from Dayananda Sagar College and delegates of the congress. Delegates shared their experiences and gave a very positive feedback about the GOLD Congress. Delegates departed with a lot of thoughts lingering in their minds, with new friendships, plans for future IEEE activities and filled with hope to make a bigger impact to the society, bringing the two day exciting 2009 GOLD Congress to an end.



Pictured: GOLD Congress Attendees

IEEE GOLD Seattle Humanitarian Seminar

By Curtis Lu
(IEEE GOLD Seattle Chair)

The 2010 IEEE GOLD Seattle Humanitarian Seminar was held on Thursday, February 18th at the University of Washington. This event was organized with the help of the University of Washington IEEE Student branch and the EWB student group.

There were 31 attendees there to listen to the keynote speaker, Dr. Robin Podmore and the 3 panelists. Dr. Podmore gave a good introduction into humanitarian work, how electrical engineering fits in and examples of how electrical engineers can get involved. The panelists told their stories of the humanitarian projects that they personally participated in. The event was a success and attendees provided positive feedback to make next year's event even better. Be on the look out for a humanitarian event near you.

You can find out more about the event, speakers and even watch their presentations on our website: http://ewh.ieee.org/r6/seattle/gold/humanitarian/

Pictured: Attendees at the IEEE GOLD Seattle Humanitarian Seminar

Comments on GOLD News? Write to our Readers' Forum at GOLDRush@ieee.org

PEER-REVIEWED CONTRIBUTIONS

Why Should You Personally Exercise Your Intellectual Property Rights?

By Michael J. Eurice (IEEE Member)

The motivation to personally register or patent your intellectual property (IP) can simply be cash; intellectual property has substantial tangible value even though it is not itself tangible. The motivation can also be as unrelated as the need to fend off unemployment. For example, suppose you used a program on your current job which you had developed before you landed the job, and after a year or so with this employer (during which only you used the program with no company resources expended) you decided to make a career move, perhaps to a competitor. Your present employer could claim ownership of your program and use the court to stop you from using it. At this point you may have no job and a long battle to establish your property rights so you can work again. But for a bit of effort perfecting your rights, you could have short-circuited the company's claim.

Because of an erroneous company claim to your IP rights, you could lose your employment for a significant period of time. If, in addition, you had also signed an employment agreement which contained an IP clause, then you would have almost no chance to recoup your IP rights. Only under a narrow set of circumstances has our courts found employment contract terms unenforceable, such as employment offers in which the applicant did not have a reasonable choice or the ability to understand the terms of an employment agreement.

It seems that almost any situation in which a recent graduate is saddled with staggering education debt would qualify as one in which no reasonable choice exists. Considering the current state of the job market, the bargaining power of the employer would overwhelm that of most applicants, right? Not so in practice – the same education which caused your debt and equipped you to develop your distinctive ideas has also, by fiat, labeled you as a sophisticated bargaining party. Because of your level of education, you have to protect intellectual potential, not just IP.

A few fundamental aspects of intellectual property should be understood at this point:

IP Rights are not self enabling.

You, as the originator of the intellectual property, must validate your property and ownership prior to anyone else if you wish to control what benefit flows from it. For novel and useful items, you have to diligently develop the idea and then apply for patent with the U.S. Patent and Trademark Office. In the case of expressive or artistic works, copyright protection begins the moment the expressive idea is fixed in a tangible medium, but this right is not enforceable in federal court unless the property is registered with the U.S. Copyright Office. Your State law may provide additional copyright protection for works not embraced by the federal statute. If your IP is a logo, symbol, or a phrase which identifies the source of what it is attached to, you have an exclusive right to its use provided you have registered the mark with your State's business regulators or applied for registration with the U.S. Patent and Trademark Office. At the federal level, trademark differs from patent in that most types of marks must also be

accompanied by evidence of commercial use and your rights can be lost through insufficient control of the mark's use.

IP Rights are not self policing.

Unlike fire or police departments, there is no public entity that tracks and reports infringements on your intellectual property. You, the holder of the rights, have to discover any unauthorized use. The internet has eased this task, and there now exist companies which crawl the web in tandem with conventional investigative techniques seeking unauthorized use of your property. Once an unauthorized use is discovered, however, you must take positive action to enforce your rights (notice to the infringer, cease and desist demands, and court action if the infringement does not stop).

Conclusion.

Recognize that you have IP rights at every step of your career, and also that an interview is a bargaining situation. Negotiate retention or assignment of your IP rights during bargaining much the same as you would vacation time or compensation level. Request

a copy of any employment agreement during negotiations and ask for modifications if the terms seem unduly one-sided. Bear in mind that most job markets currently favor the employer, so carefully gauge acceptance of your negotiating points, taking care not to alienate your interviewer (especially if your entire economic well-being depends on getting this job).

While Mike's practice currently centers on West Virginia law for State matters and U.S. Federal law for some aspects of trademark and copyright, he plans a shift in focus to the national and international intellectual property forums upon his registration with the U.S. Patent and Trademark Office.

Mike graduated from the Johns Hopkins University with a Bachelor's in Electrical Engineering degree in 1992, and from Penn State University's Dickinson School of law with a Juris Doctor degree in 2005.

Mike is a member of IEEE, ABA, and AIPLA and is admitted to practice before the State Courts of West Virgina, the U.S. District Courts for the Northern and Southern Districts of West Virginia, the U.S. Circuit Court of Appeals for the Federal Circuit, and the U.S. Court of International Trade. Mike expects registration with the U.S. Patent and Trademark Office on 19 February 2010, and its concomitant admission to practice before the U.S. Receiving Office and International Bureau of the World Intellectual Property Organization.

Use of Radio Waves for Ultrasound Biomedical Imaging

By Andrew Nguyen (IEEE Member)

The ability to accurately image biological tissues is useful and important not only for medical diagnosis and treatment of patients but also for medical research. Imaging cancerous breast tissue, internal structures of organs, tumors, vascular structures, fractures in bones, and hidden infections under the skin are just a few examples demonstrating the benefits of using medical imaging techniques. Medical imaging based on the use of radio waves has a long history and several radiowave-based techniques have been developed and demonstrated. Ultrasound techniques have also been used for various medical imaging applications such as visualizing muscles, tendons, internal organs, their size, structure and any pathological lesions with real time tomographic images. It has been used to image the human body for at least 50 years and is considered as one of the most widely used diagnostic techniques in modern medicine. The ultrasound technique is perhaps most well-known for ultrasound images of unborn babies.

Radio-wave imaging techniques are convenient due to the fact that it can be conducted without making contact to the object, can penetrate into the human body and/or biological tissues and have relatively good imaging contrast between the tissue being imaged and the surrounding. Imaging of internal organs can thus be formed conveniently through a patient's clothes. Radio waves also do not have ionizing radiation, which imposes hazards such as cancer production and chromosome breakage. Radio-wave imaging, however, is typically done in a narrow bandwidth in the low microwave frequency range such as 3 GHz. As a result, problems of low range (or depth) and cross range (or angular, lateral or spatial) resolution are expected. On the other hand, ultrasound imaging provides fine resolution even when operating at a much lower frequency than radio waves, but suffers from poor imaging contrast. A logical development to exploit advantages of both radio wave and ultrasound techniques would be to combine radio and ultrasound waves for imaging purposes.

A radio-wave pulse illuminating biological tissue generates heat in the tissue, similar to heat produced in objects, such as meat, illuminated by a radio signal in microwave ovens. This heat, due to the absorption of radio-wave energy, results in thermal expansion in the tissue which in turn creates acoustic (or ultrasonic) waves. Tissues with high conductivity result in high dissipation of

"Radio-wave induced ultrasound technique possesses unique features of non-contact, good penetration, fine imaging contrast, and good spatial resolution."

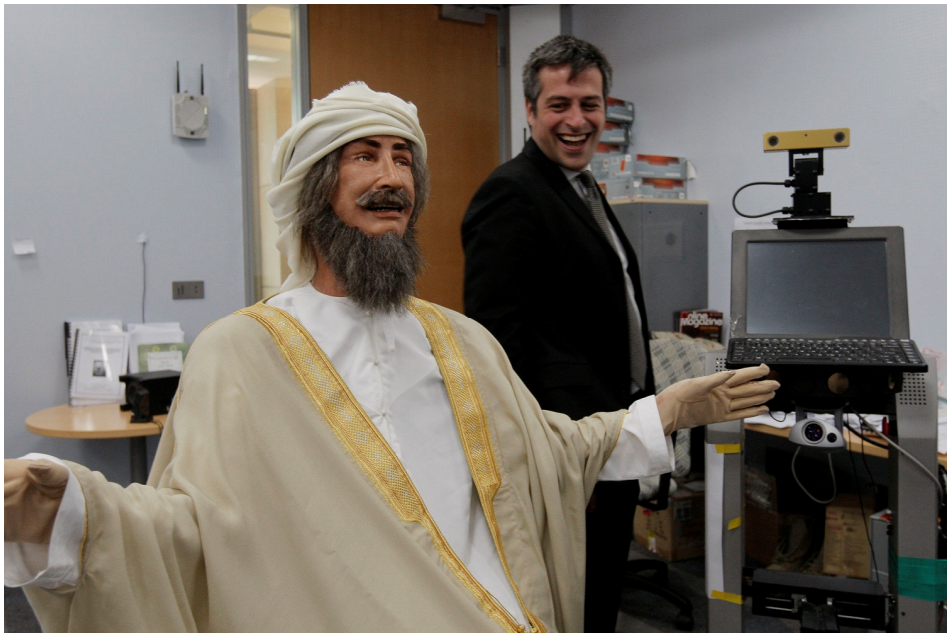
the radio wave energy and hence large heat conversion, leading to high induced acoustic wave amplitude. Biological tissues with high water content, such as muscle and skin, have relative dielectric constant and conductivity substantially different to those found in the biological tissues with low water content, such as fight and bone, at each radio frequency across a wide frequency range. The substantial variations of the dielectric constant and conductivity result in significant difference between the amplitudes of the induced acoustic waves in different tissues for a given irradiating radio wave, enabling high image contrast between high and low water content tissues. For instance, cancerous breast tissues typically absorb 2-5 times more than surrounding normal breast tissues due to increased water and sodium within malignant cells, leading to substantial difference in the amplitude of the induced acoustic waves which makes it possible to detect breast cancer. The radio-wave induced acoustic concept is essentially the same as that in the ultrasound technique, except that the acoustic wave is generated indirectly from a radio wave upon incident with the tissue, rather than being sent directly from an ultrasound device. Since the image is formed using generated ultrasound rather than radio wave, the spatial resolution is expected to be as good as that obtained in the conventional ultrasound imaging technique. It is this unique characteristic that makes the technique potentially more attractive than either radio-wave or ultrasound imaging techniques alone.

The radio-wave induced ultrasound technique possesses unique features of non-contact, good penetration, fine imaging contrast and good spatial resolution. In particular, using a carrier-less radio pulse, which consists of multiple concurrent signals at different frequencies, may enable the irradiating pulse to allow optimal excitation of different biological tissues concurrently. This may lead to higher-quality images of samples. Radio-wave induced ultrasound technique may enable us to "see farther, wider and clearer" into patients' bodies and biological tissues.

Comments on GOLD News? Write to our Readers' Forum at GOLDRush@ieee.org

Building the Arab World's first Interactive Robotics and Media Laboratory: Challenges and Opportunities

By Dr. Nikolaos Mavridis



Pictured: "Ibn Sina" Arabic-speaking android and the "FaceBots" Facebook-connected social robots

It was during the Fall of 2005, two years before I graduated with a PhD from the Massachusetts Institute of Technology's Media Lab that I first visited the United Arab Emirates. This place was a fast-growing, multicultural state at the crossroads of the world, where ancient traditions mix with the ultra-modern, and where the desert is turning into dream cities. Regarding academia, at least at the level of new institutes and impressive campuses, there was quite a burst of activity taking place.

In 2007, given an attractive faculty position offer, in terms of granting the lab infrastructure requested, I decided to join the United Arab Emirates University, the oldest and largest university of the country, previously having been ranked as number two in research in the Arab world. Thus, the Interactive Robots and Media Lab (IRML) was founded, and its two major projects so far are:

First, "Ibn Sina": the world's first Arabic-speaking conversational android robot is part of an interactive theatre installation enabling multiple forms of tele-participation: robotic telepresence through motion capture, interaction with virtual characters controlled by remote humans in online virtual worlds, as well as some first experiments in thought-controlled teleoperation through brain-computer interfacing.

Second, "FaceBots", which was also selected by Microsoft ER as one of 8 projects out of 74 worldwide that had applied for its Human-Robot-Interaction CFP. Facebots are mobile robots with face recognition and natural language dialogue, which utilizes as well as publishes information on the "FaceBook" website, in order to make interesting dialogues with humans by referring to shared memories and shared friends, in order to create more meaningful long-term human-robot relationships. Both projects have received worldwide media attention and were featured on BBC and AFP among others. In addition, many other smaller-scale projects are taking place.

The lab has had a very warm reception from our students, many of which carry out senior projects in the lab, as well as participate in our somewhat unconventional annual international summer school, which is mainly research-oriented. Roughly half of our students come from various parts of the world, and often from prestigious universities. Teams of five students carry out mini-projects which reach fruition in an exciting and intense four weeks, and are often extended with remote collaboration adding to what is an amazing experience for everyone involved, and a major thrust to the lab.

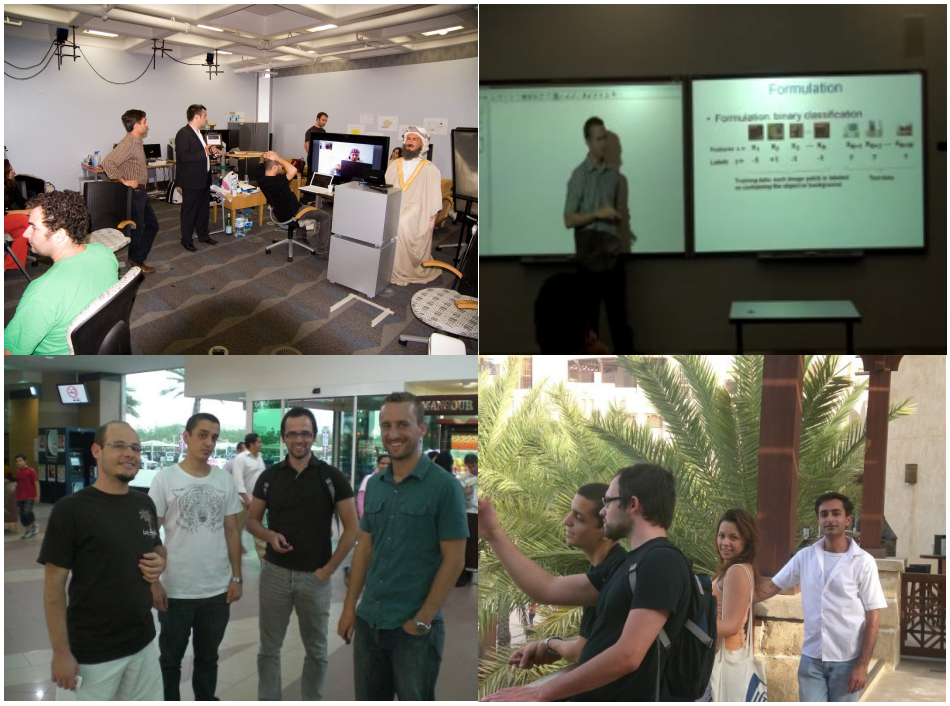
However, apart from the accomplishments, and the fun and benefits for everyone involved, the road has not been an easy one, and there have been numerous challenges which require constant efforts in order to enable operation and growth. Firstly, PhD programs are just starting in the gulf region and thus, so far continuity of knowledge and lab culture require significant efforts, as most members turnover annually. Secondly, the research funding agencies in the UAE suffer from serious organizational and operational shortcomings. The funding size is very small in terms of any international comparison, agencies do not provide reviews, and usually have long delays in their answers, if they ever arrive. Thirdly, bureocracy and obsolete operational processes of universities create huge obstacles. I often find myself spending at least two working days per week travelling to offices where phones do not answer, in order to follow up for the often five or so signatures required, even for minute tasks. It is not only the length and inflexibility of the processes but also the non-accountability of the links, the lack of written policies, and a twenty to one faculty to secretary ratio. No beginning is easy, though. The big question for us is how much room for improvement really exists. We are trying our best to find ways around.

Apart from the challenges, though, there are both the existing accomplishments as well as the continuous excitement of seeing the lab

grow and our students prosper. There exist huge opportunities for further development of research in the region – not only for the sake of our field per se, but towards the benefit of the people, and prosperity and peace worldwide. If you are interested in helping out, or have a similar vision of developing research in the region, don't hesitate to contact us. We hope that the IRML lab, and other such parallel efforts, will help towards achieving these worthy goals!

News and Videos: http://irml.uaeu.ac.ae and youtube channel irmluaeu

Dr. Nikolaos Mavridis is an Assistant Professor of Intelligent Systems, UAEU Founder and director, Interactive Robots and Media Lab United Arab Emirates.



Pictured Above: Second Annual Month-Long Research-Centered International Summer School, July 2009

ARTICLE FROM CONNECTED PLANET

Smart grid: Definition, road map and breadth of this grand challenge

By H. Alan Mantooth (IEEE Fellow)

Republished with permission: http://telephonyonline.com/home/commentary/smart-grid-road-map-0105/

A smarter electric power grid promises greater efficiency, reliability and security leading to greater use of renewable energy sources that positively impact our environment. We can all agree that such attributes, if they can be achieved affordably and sustainably, are worthy of our efforts as a global community. That said, it is instructive to provide a definition for the term "smart grid" to clearly explain why this energy transformation is a grand challenge of our time.

The term "smart grid" refers to hardware and software added to the power system to achieve: a.) a more autonomous responsiveness to events that impact the electrical power grid, and b.) optimal day-to-day operational efficiency of electrical power delivery. Among the events that impact the grid are outages (scheduled and unscheduled), load-balancing and peak-shaving — or sending power back to the grid when demand is high. Smart grid hardware and software encompasses: a.) metering and monitoring of the power system, b.) communicating the conditions of the grid in real time, and c.) controlling the flow of power to maintain reliable service and stable operation. During the development of a smart grid infrastructure, it is reasonable to design the security protocols, renewable-based systems (wind, solar, plug-in hybrid electric vehicle, biomass), time-of-use/demand-driven pricing and other aspects of the electrical power business into this next generation of the grid.

With this definition in mind, the next question that arises is "Where are we in the drive to a smart grid?" For consumers, their ability to manage power usage within their homes and react to pricing that impacts them is a point on the road map that should be realized for many in the next few years. The U.S. federal government stimulated this with over $3 billion that largely went into smart metering deployments. As professionals and policymakers in this field around the world, governments, IEEE, and many other organizations realize that the electrical grid infrastructure needs improvement upstream of the consumer in order to meet that definition of a truly smart grid.

Consider that the road map to a smarter grid has four waypoints. The first is advanced metering and monitoring. The second is a transmission system that can efficiently move power from one location to another. The third is a power grid that incorporates large- and small-scale distributed generation with energy storage that is manageable by power providers. The fourth is the secure and reliable communications infrastructure that operates in tandem with the future electrical power grid.

These waypoints are not laid out in a straight line such that we have to go from one to the other along our path to the smart grid. In fact, different organizations and industries engage to manage the complexity involved in designing this second-generation power grid (Gen2PG). Thus, not every city, town or state will achieve a smart grid at the same time. Rather, the revolutionary result of the smart grid will be achieved through evolutionary means. In order to maintain our standard of living and the quality of service we have come to expect, this architectural change of the power grid must evolve. At the present time, we are approaching the first waypoint above in the next two to three years. Achievement of the full smart grid grand challenge is a decade away, as long as the courses are maintained and funded.

Critical improvements are being made to the grid as it exists now. For example, large power providers have deployed advanced microprocessor-based monitoring on their systems in order to pinpoint service outages. In fact, the Tennessee Valley Authority in the U.S. recently released information about its advanced monitoring capabilities as a model for others to consider. Another example is the automated algorithms used by some utilities for load-shedding when peak demand gets too high.

The smart Gen2PG will also involve advances from engineers (electrical, computer, mechanical, industrial, agricultural, chemical, environmental), biologists, physicists, chemists, economists, policymakers and regulatory bodies. These disciplines have to produce advances in materials, control algorithms, logistics, electronics, electrical switch gear, electrical systems for wind, solar, storage, distributed computing, cyber security, communications, biomass feedstock generation, sustainability assessment and electric vehicles, to name a few. In addition, most of the world has existing electric power grids that have served the global community well thus far. We cannot ignore that this complex machine needs to continue to provide for our needs as we try to change its architecture. From a technology standpoint, this grand challenge is broader and will activate more industries than any challenge facing our generation today.

H. Alan Mantooth is an IEEE Fellow and the Executive Director of the National Science Foundation Center on Grid-connected Advanced Power Electronic Systems.

NOTICES

IEEE Educational Activities Board (EAB) 2010 Awards

The IEEE Educational Activities Board (EAB) Awards recognize and honor individuals and companies for major contributions to engineering and technical education. Awards are given for meritorious activities in accreditation, continuing education, educational innovation, pre-university education, service to the IEEE EAB, employee professional development, informal education systems, and related achievements that advance the practice of engineering and of engineering education.

Nomination Deadline - 28 May 2010

Meritorious Achievement Award in Accreditation Activities

Nominee must be a current IEEE Member. The award consists of US$1000, a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Meritorious Achievement Award in Continuing Education

Nominee must be a current IEEE Member. The award consists of US$1000, a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Meritorious Achievement Awards in Informal Education

Nominee must be a current IEEE Member. The award consists of US$1000, a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Major Educational Innovation Award

Nominee must be a current IEEE Member. The award consists of US$1000, a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Pre-University Educator Award

Nominee must be a current pre-university classroom teacher. The award consists of US$1000, a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Meritorious Service Citation

Nominee must be a current IEEE Member who is a past member of EAB or current or past member of an EAB Committee, but not a current voting member of the EAB Awards and Recognition Committee. The award consists of a brass and walnut plaque and up to US$2000 in travel expenses to receive this award.

Employer Professional Development Award

Nominee must be an organization employing IEEE members. The award consists of a brass and walnut plaque.

Society/Council Professional Development Award

Recognizes IEEE Societies or Councils for major contributions to the professional development of its members through outstanding products, services and support in the areas of life-long learning, continuing education and professional development. The award consists of a brass and walnut plaque.

Section Professional Development Award

Recognizes an IEEE Section for major contributions to the professional development of its members through the provision of outstanding products, services and support in the areas of life-long learning, continuing education and professional development. The award consists of a brass and walnut plaque.

Visit EAB Awards Nominations web page:
http://www.ieee.org/eab-awards
For more information,
Email: **eab-awards@ieee.org**

NOTICES

Call for Articles: GOLDRush June Edition

IEEE GOLDRush invites you to submit an article for publication in the June 2010 edition. The article topic(s) shall be of interest to young professionals, the primary readers of the publication. Articles must be **strictly no more** than 700 words and should be sent to the IEEE GOLDRush editor at GOLDRush@ieee.org **on or before** 7 May 2010. Please feel free to include captioned photos or pictures with your submission. All articles and photo(s) will be peer reviewed and edited if necessary. Full submission guidelines must be adhered to and can be found at http://www.ieee.org/web/membership/gold/newsletter/goldrushPolicy.html

Make the most of this great opportunity to express your ideas!

Upcoming GOLD Webinars

Have you ever been involved in conflict in the work place? Have you struggled with how to resolve issues amongst your colleagues, with your manager, or others in your professional environment? As part of the Professional Development Webinar Program, IEEE GOLD is proud to host a two-part webinar series on Conflict Management. This special, in-depth webinar series will help you understand and learn to manage conflict more effectively. Register today at https://icm3.ieee.org/eventmanager/onlineregistration.asp?eventcode=3ix .

Part 1
Date: Wednesday, 24 March 2010
Time: 2:00pm – 3:00pm Eastern Standard Time

Part 2
Date: Wednesday, 21 April 2010
Time: 2:00pm – 3:00pm Eastern Standard Time

Copyright Microsoft

GOLD COMMITTEE 2010

Chair
William Sommerville

Past Chair
Adrian Pais

TAB Representatives to GOLD
Elya Joffe
Roelof Swanepoel
Gim Soon Wan

MGA Representatives to GOLD
Gustavo Giannattasio
Guruprasad Madhavan
Megha Joshi

Regional Coordinators

Region Overseer
Jeffry Handal

Region 1
Uri Moszkowicz

Region 2
Michael Pearse

Region 3
Wah Garris

Region 4
Aisha Yousuf

Region 5
Kheng Swee Goh

Region 6
Gigi Lau

Region 7
April Khademi

Region 8
Joao Figueiras

Region 9
Salomon Herrera

Region 10
Helene Fung

GOLD Representatives on IEEE Societies

Society Overseer
Matthias Reumann

Aerospace & Electronic Systems Society
Mike Roberts

Antennas & Propagation Society
Ryan S. Adams

Broadcast Technology Society
Heidi Himmanen

Circuits & Systems Society
Sunil Pai,
Delia Rodriguez de Llera,
Martin Di Federico,
Pui-In (Elvis) Mak

Communications Society
Angela Yingjun Zhang

Computational Intelligence Society
Justin Zhan

Computer Society
Carlos Rueda-Artunduaga

Consumer Electronics Society
Tom Wilson

Council on Electronics Design Automation
David Atienza

Education Society
Aju Thomas

Electron Devices Society
Ravi Todi

Engineering in Medicine & Biology Society
Matthias Reumann

Geoscience & Remote Sensing Society
Shannon Brown

Magnetics Society
John Nibarger

Microwave Theory & Techniques Society
Sergio Palma Pacheco,
Jenshen Lin

Photonics Society
Lianshan Yan

GOLD Representatives on IEEE Societies (continued)

Power & Energy Society
Glen Tang

Robotics Society
Agostino Desantis

Society on Social Implications of Technology
Emily Anesta

Solid-State Circuits Society
Sean Nicolson

Systems, Man & Cybernetics Society
Ferit Sahin and Wing Ng

Technology Management Council
Marisa Bazanez-Borgert

Vehicular Technology Society
William Sommerville

IEEE GOLDRush Volunteers

Editor
Timothy Wong

Immediate Past Editor-In-Chief
George Gordon

Editorial Assistants
Lara Fast (MGA Staff)
Lori Hogan
Kristi Hummel
Lisa Lazareck
Sabarni Palit
Michael Pearse
Rajnish Sharma
Agusti Solanas
Mohnish Tuladhar
Aisha Yousuf

Graphic Designer
Alex Wong