

DECEMBER 2009

GOLDRush

The quarterly newsletter of IEEE GOLD for young professionals



Celebrating 125 Years
of Engineering the Future



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MESSAGE FROM ADRIAN PAIS 2009 MGA GOLD Committee Chair

Dear IEEE GOLD members,
This year has been a tough year for many of us. The catastrophic economic downturn, which began in September 2008 with the fall of Lehman Brothers, became a global recession this year, and many of us are still feeling it and wondering when complete relief will come.

Engineers, scientists and technical professionals have especially been hard hit. In April 2009, the United States Department of Labor's Bureau of Labor Statistics (BLS) released statistics showing that electrical and electronic engineers' rate of joblessness in the United States increased from 2.4 percent in 2008 to 4.1 percent in the first quarter of 2009. The jobless rate for computer software engineers increased from 1.9 percent in 2008 to 4.2 percent in the first quarter of 2009. While analysts believe that things are beginning to improve, I definitely do not believe that we have weathered the storm just as yet.

This year I have grappled with the question of how GOLD is able to help young professionals in these difficult and turbulent times. If GOLD is not seen to help young professionals who are arguably in greater need now than ever before, then I question our very existence and purpose. Is GOLD a place that makes a difference to the careers of young professionals and equips them with skills to help them get the jobs they desire? Does GOLD present networking opportunities that forge positive and friendly relation-

ships, giving fruition to innovative ideas? Are we an organisation that genuinely seeks to fulfil the vision and mission of the IEEE by fostering the development of technology for the benefit of humanity, or are we merely a 'closed' society that has very limited external focus?

The opportunities and benefits of IEEE membership are endless (as I detailed in my message in the [GOLDRush September 2009 Edition](#)). Yet, many in my professional network whom I have spoken to do not believe that IEEE membership is essential to their careers. In part this is because they are not



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This year has brought tough times for many young professionals.

fully aware of the benefits of membership. Another reason, which I admit to, is that we are simply not meeting their needs and are not able to make them say 'wow'.

We want you to say 'wow'. We want IEEE membership to bring you opportunities that are invaluable for the rest of your life and career. We want IEEE to be the home that welcomes you when you are unemployed and need to find a new job. We want IEEE to be the medium through which you find that new job. We want IEEE to introduce you to people who



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can help you to take your innovative ideas forward. We want you to embrace IEEE membership so much that you will never want to let go of it. The GOLD Committee is tirelessly working on turning these visions into reality. In 2009, we have defined a new strategic plan for 2010 to 2012, developed a new leadership reference manual to educate our

world. We realize that we have a long way to go, and if we are to succeed, we will definitely need your help along the way.

I would like to close off by saying that it has truly been the most amazing opportunity and privilege to serve as GOLD Committee Chair this year, the 125th anniversary of the IEEE. It is you all that have made my service to the IEEE worth it. I would like to especially thank all the volunteers and staff for their tireless efforts this year for our members. There are great things coming for the IEEE and GOLD, and we have a great group of people who are committed to moving us forward. We want you to join us on this journey. Jump on board!

Best wishes,
Adrian Pais
2009 GOLD Committee Chair

SEA CHANGE

By George Gordon, IEEE GOLDRush Editor

Cast my eyes upon the map, it seems I am currently about as far away from home as I could possibly get. Technically speaking, I would need to fly about two hours to the South-East of my current location to southern Spain to be at the exact antipodal point of my home. A little over two months ago, I packed up my belongings, bid farewell to my friends and family and relocated from my home in Auckland, New Zealand, halfway across the world to Cambridge, United Kingdom. I will remain here for at least 3 years while I undertake my Ph.D. in Electrical Engineering (for those interested, I will be working on Radio Frequency Identification tag systems). This is undoubtedly the biggest change I have made in my life to date and it was certainly the toughest. It is very difficult leaving behind everything you know, including your friends and family, especially in such a close knit community as New Zealand. But change plays a vital role in all of our lives,

and it is arguably one of our most powerful driving factors.

Change is almost always a prerequisite for progress. People had to change their lifestyles drastically in order to spur on the rapid growth of the personal computer. If people had simply ignored these revolutionary inventions human progress would have been hampered severely. We are now being told that as a species, we will have to change our ways with regards to how we treat the environment in order to progress towards a sustainable exist-

tence and avert catastrophe. A major change must be our first step towards progress. Likewise, if you want to progress in your professional career you will often need to make a change, whether this be achieving better re-



Me in the Great Court, Trinity College, Cambridge



sults to impress your superiors or perhaps even applying for senior roles at other companies.

Change often brings with it risks and challenges, and consequently it offers a great character building opportunity. Major changes can put you on the spot, forcing you to adapt and use all the skills you possess to their maximum potential. It can force you to achieve things you never thought possible - a true test of your mettle. Thinking on your feet and coping in unfamiliar environments is a vital life skill. For example starting a new job, especially in a role of responsibility, can be very difficult - there are new systems to learn, new people to forge relationships with and a range of other challenges. However, it is your ability to cope in this situation and deal with this major change that will determine your future success in the role and will earn you the respect of others.

Last but not least change is what makes life interesting. Consider how much life has changed in the past 20 years. I can still recall the days before the Internet was readily available. The Internet has opened up a world of exciting opportunities and today it is difficult to imagine how we would cope without it. Change is exciting and is necessary to keep life interesting and bring in new and fresh ideas.

This year GOLDRush has seen a number of changes: a new layout, a presence on Twitter and Facebook, a number of new regular

features and a rapidly growing readership. The next major change will be the introduction of a new Editor-in-Chief for 2010, as this will be my last edition in this role. Starting from the March 2010 Edition, Timothy Wong, the current Chair of the IEEE Western Australia GOLD Affinity Group and a GOLDRush Editorial Assistant, will be taking over the role of GOLDRush Editor-in-Chief. Timothy is a very capable and experienced author, volunteer and most importantly, leader. Just as with the other examples given above, I view this change in a very positive light and I am sure Tim will take GOLDRush to new heights. You will have much to look forward to in 2010.

It has been a true pleasure producing GOLDRush in 2009 and I would like to thank the excellent GOLDRush team and the MGA GOLD Committee for their support. Many thanks also to all those authors who have contributed articles this year and last

but not least, thanks to you the readers - it is for your benefit that this publication exists.

Change is an inevitable fact of life and it is how we deal with it that makes all the difference. It should be embraced rather than feared. Following the recent major changes in my own circumstances, I have quickly started getting right into my work and am thoroughly enjoying my new life. I have made many new friends, and am involved with a number of societies and sports teams. I can feel that some of the best times of my life lie ahead and that this change has been a very positive one. As the well-worn saying goes, "with change comes great opportunity".

I wish you all the best for the coming year.



READERS' FORUM

Your questions and opinions

IEEE and Partnership

As with any successful organization, strong partnerships are vital to the success of GOLD. The importance of partnership became clear to us after talking to leaders from both industry and IEEE. While busy young professionals may feel that IEEE and their jobs in industry are competing for their time and skills, if a partnership between the two can be formed the resultant effect is in fact highly beneficial to all parties.

There are a huge number of branches, sections and groups within IEEE that volunteers can partner with and make use of. Take for example our own story from the Atlanta and Dallas Section GOLD Affinity Groups. After much brainstorming we decided that partnering with our local IEEE Student Branch would be a great idea. The students would be very interested in hearing from companies about employment opportunities and the GOLD volunteers could in return have an opportunity to talk about their own experiences in their firm and help to promote their company.



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 5 February 2010 for inclusion in the March 2010 edition. Submissions must be no more than 200 words and may be edited if necessary.

Such partnerships will provide many new event opportunities for GOLD Affinity Groups. For example, they could host joint events with Student Branches in their area and invite people from industry to talk about their experiences. Furthermore, they could host career fairs with other professional bodies and in doing so would greatly benefit graduating students and improve the visibility of GOLD and IEEE to student groups. GOLD could even be a part of every major IEEE technical conference and could be represented within all IEEE special interest groups.

One such system of knowledge sharing is already successfully occurring between the Atlanta and Dallas GOLD Affinity Groups. We have had many fruitful discussions on addressing the issues in our respective Sections and getting ideas from one another. IEEE is all about sharing beyond any boundaries and it is strong partnerships that make this possible.



VIJAY JAYARAMAN

IEEE Atlanta Section GOLD Vice-Chair



MOHIT MALHAN

IEEE Dallas Section GOLD Chair

Modern Day Cro-Magnon

Recently, I began to consider the similarities between the current situation of humanity and that of our recent ancestors. Could we be the modern day equivalent of Cro-Magnon?

Allow me to explain: Cro-Magnon is one of the early types of modern humans as identified by archaeologists. Archaeological findings suggest that Cro-Magnon is our nearest ancestor who lived on the earth thousands of years ago. It seems that modern day man and Cro-Magnon share many similarities. For instance, we are always trying to improve communication means and save our planet by thinking green. Cro-Magnon men had also continuously improved their communication in terms of developing languages and in addition were equipped with tools to survive extreme weather and starvation (the Ice Age!). At my company, we are always trying to improve communication networks and provide better assurance of services to facilitate human communication. Like a lot of people, we are also equally concerned about reducing our carbon footprint to avert extreme future weather conditions.

Even with all the eco-friendly activities currently happening, a question still lingers. Although we are trying to create a better planet which is a lot safer and more secure, modern technology can only take us so far. While modern technology can relay information about events when the planet unleashes its fury such as during earthquakes, floods and tsunamis much faster than in ancient times, it cannot directly change the outcome of these. Are we going to be able to adapt our way of life and so that modern day man can continue to walk on the face of the earth for millions of years to come?

NITIN KESHAV

IEEE Member and GOLD Bangalore Treasurer, India

INVITED ARTICLE

The IEEE Public Visibility Initiative Seeks to Tap the Wealth of GOLD

By Lara Fast (IEEE Member and Geographic Activities, GOLD) and Sara Magnola (IEEE Corporate Communications, Public Visibility Initiative)

You, as an IEEE GOLD member, have invested a lot of time and effort into learning your field, honing your technical skills, and developing your career. You've paid your dues in school, engaged in the IEEE scientific community and know your field. You are a technical expert. As an IEEE GOLD member, you now have an opportunity to expand your professional portfolio by becoming a part of the IEEE Public Visibility Initiative.

The IEEE Public Visibility Initiative - a communications program seeking to raise IEEE's global visibility and increase public understanding of how engineering, computing and technology benefit humanity -- seeks to engage IEEE GOLD members as technical experts to interact with media on a range of hot topics spanning the globe.

As an IEEE GOLD member participating in the Public Visibility Initiative, you would join a world-wide community of IEEE members who are interviewed by reporters looking for comments and insights on specific technical topics, who in turn write articles for a variety of top-tier news outlets.

Thorsten Holz, a recent graduate of the University of Mannheim and an IEEE

GOLD member, is a technical expert from the Public Visibility Initiative and was recently quoted in an article in *ComputerWeekly.com*, the number one online destination for senior IT decision-making professionals in the UK. The article, in which he gave commentary on Microsoft's decision to release free security software, was also featured as one of the lead stories on the software section of the website.

"(Being a technical expert) I get to work with people in other fields, which is very interesting and I interact with the press in Germany and Austria, as well as other reporters, about the work I am doing," says Holz. "When something comes up in my field which I can contribute to, IEEE arranges a phone interview with a member of the press and I get to share my opinion and points of view."

What are the topics that resonate with our global audiences and the media? To answer this, research was conducted to identify messages that move different audiences and uncovered key global themes and topics that resonate with each group. "Hot" topics – leading technology issues – include sustainable energy, health care, biomedical engineering, Earth observation, security, and gaming to name a few.

This year alone, the Public Visibility Initiative secured top-tier media interviews for Technical Experts on these hot topics with *Scientific American* (US), *The Wall Street Journal* (US), *The Guardian* (UK), *ComputerWeekly* (UK), *CNBC/Greenbang* (UK), *The Hindu* (India), *The Times of India* (India), *Channel NewsAsia* (India), *Bloomberg* (India), *Science & Technology Daily* (China), *CIO* (China), and *China Information World* (China), among others. High profile speaking engagements were also secured at Fortune Brainstorm:TECH (US), Interop's Energy Camp (US), and the 'Go Green' online forum, among others.



Thorsten Holz, a recent graduate of the University of Mannheim and an IEEE GOLD member, is a technical expert from the Public Visibility Initiative and was recently quoted in an article in *ComputerWeekly.com*

Additionally, media coverage of Technical Experts is featured in the IEEE online Newsroom, which provides a central repository of timely, accurate access to articles and interviews featuring Technical Experts and the important work in which they are involved.

"Getting to share my ideas with other people ... that's the main benefit of being an IEEE Technical Expert," Holz says.

If you are interested in becoming an IEEE Technical Expert, please contact Lara Fast, MGA Young Professionals Program Manager, at L.Fast@ieee.org. For more information about the IEEE Public Visibility Initiative, visit <http://www.ieee.org/web/aboutus/news/index.html>.

**Comments on this article?
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MEMBER PROFILE

Every issue, we profile a GOLD member in the workforce. This issue's profile looks at:

João Carlos Prazeres Figueiras

Region 8 GOLD Coordinator



Career description:

Since May 2009 I have been employed by ZTE Portugal as a Telecommunication Engineer. As a multinational company, ZTE is able to challenge me every day on both technical and interpersonal levels. Multi-cultural environments have always been a passion of mine, and as a result I have lived part of my life abroad. In 2004, I headed to Denmark in order to finish my Masters studies. In the same year I started a Ph.D. on wireless positioning systems at Aalborg University, which for me is one of the most interesting topics within telecommunications. During 2007 I was awarded a scholarship to continue my studies in the USA for half a year. This achievement provided me an opportunity to do

part of my research at the University of California in Los Angeles and then Google in Mountain View. In 2008 I finished my Ph.D. and during the subsequent year, I have continued to work as a postdoctoral researcher at Aalborg University. From my earliest years of university, I have been continuously involved in privately run innovation projects.

Throughout my entire career I have always strived for, and will continue to strive for, a standard in life that allows me never to stop scaling the highest professional mountains while combining my global, multi-cultural and multi-lingual passions that have shaped my character.

Personal interests:

I am a big music fan and I cannot stop listening to music. Every spare moment I have, I turn up the radio or I play some tracks. The genres and the languages of music are varied. Besides this, socializing is also one of my personal hobbies. It is just great, relaxing and interesting to hang out and talk to people. I do also like sport a lot (though I haven't done much lately!). From 1989 until 2004 I was constantly involved in judo, which is definitely my favorite sport. One of my favorite hobbies, if not my favorite, is travel. I love to travel! I have already been to nearly 35 different countries and I still want to get to know more. I love to be within the crowds, understand their lives and feel what they feel.

How has IEEE shaped your career?:

IEEE has always given me the chance to get to know many professionals working on the same subjects as I do. Through IEEE, I have been able to get the right contacts and even succeed in some of my career objectives. Working for Google is an example of where IEEE was crucial in helping me to get hired. Besides the professional side of IEEE, it has allowed me to get to know many good men and women with whom I have now become good friends.

Words of advice for young professionals:

Building a career is not simple and is never a "one shot" thing. It must be built step by step and you must never rest upon previous achievements. You should never give up and should continuously search beyond what is known to you. One of the things that I have learnt during my still short career is that you should never be quiet. Being visible, talkative, and fearless in expressing your point of view is a major driver of your career. Talking to people around you is eventually the simplest and most efficient way of achieving your goals. Tell them what you do, ask them what they do, tell them where you want to go, find out your common interests, and you will get there. Keep in mind that the "six degrees of separation" rule is more than just a theory.

SPECIAL FEATURE

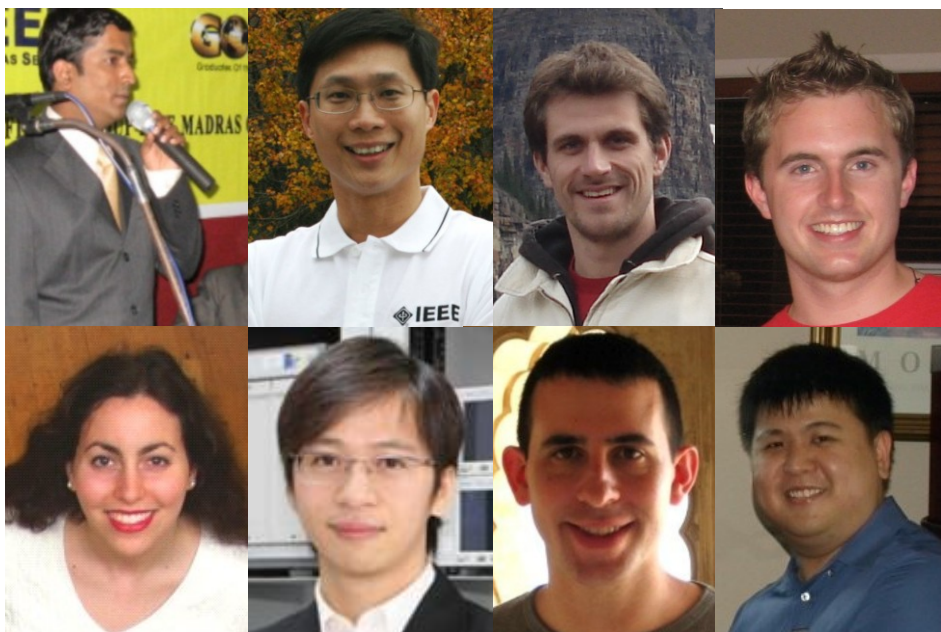
MGA Awards 2009

The awards and recognition program of the IEEE Member and Geographic Activities Board (MGA) is designed to promote, recognize, and reward excellence in the MGA operations and IEEE Geographic Unit Activities (Regions, Geographic Councils and Areas, Sections, Chapters, Student Branches, and Student Branch Chapters). This year members of GOLD were awarded both MGA Achievement Awards as well as MGA GOLD Achievement Awards. The MGA Achievement awards are designed to recognize individuals involved with MGA and/or the Regional Network who are recognized for singular achievement in the development and completion of a project(s) or activity(ies) which are directed to the fulfillment of one or more of the goals and objectives of MGA. This award is designed to recognize those substantive projects or achievements of a relatively short nature (one to three years) but which have left an undeniable imprint on the fabric of Regional Operations. The MGA GOLD Achievement award has similar criteria but is awarded for contribution to GOLD operations and fulfilment of GOLD goals and objectives. Nominees must be GOLD members at the time of nomination..

After reviewing many nominations, the MGA Board has approved the following recipients for 2009:

MGA Achievement Awards — GOLD Recipients

Sampathkumar Veeraraghavan (R10), Madras Section - for outstanding leadership and contributions toward the development and implementation of IEEE humanitarian



2009 MGA Awards recipients. Clockwise from top left: Sampathkumar Veeraraghavan, Soon Wan, Joao Figueiras, George Gordon, Timothy Wong, Uri Moszkowicz, Pui In Mak and Lisa Lazareck.

projects with government and non-governmental organizations, which engage IEEE members and geographic units in India.

Soon Wan (R1), Boston Section - for sustained leadership in developing successful GOLD programs in support of the MGA vision and mission.

MGA GOLD Achievement Awards

Joao Figueiras (R8), Portugal Section - for outstanding contributions to the public visibility of IEEE by creating the "GOLD Around the World" video.

George Gordon (R8), U.K. & Rep. Of Ireland Section - for exceptional leadership and outstanding contributions to the development of the IEEE GOLDRush Newsletter.

Lisa Lazareck (R8), U.K. & Rep. Of Ireland Section - for outstanding success in

increasing GOLD activities within the IEEE EMBS Society.

Pui In Mak (R10), Macau Section - for outstanding contributions to global GOLD activities by implementing new strategies to recognize, support, and network GOLD members.

Uri Moszkowicz (R1), Boston Section - for extraordinary leadership and dedication to enhancing Region 1 GOLD activities.

Timothy Wong (R10), Western Australia Section - for significant contributions and leadership in Region 10 and worldwide GOLD activities.

Comments on this article?
Write to our Readers' Forum at
GOLDRush@ieee.org

PEER-REVIEWED CONTRIBUTIONS

How Can We Improve Tomorrow's Engineering?

By Adama Ba
(IEEE Member)

Back when I was a student, much of what I imagined about the way the engineering industry worked is far from what I see every day now. I thought that the more financially important an industrial project was, the more engineers would have to rigorously plan to make the best estimates, take control of costs and respond well in the case of unexpected events. This would require many meetings and much communication between the people involved in the project.

I am about to enter my second year as an electronics engineer at Delphi Powertrain Systems, an automotive parts manufacturer in France. My work environment consists of a German car manufacturer, many automotive test component suppliers in both France and Germany and other branches of Delphi across Europe, all of whom I must interact with. Given the many interactions that take place between these stakeholders both internally and externally, there is a lot of money spent to maintain our resources to keep up and remain in accordance with customer requirements.

A scenario that I am likely to face on the job is the inheriting of a test bench that does not meet customer requirements. There could be a number of causes for this - an incorrect initial specification, too many attempts to upgrade the system, some orders not being delivered at the right time or difficulties getting information because communi-

cation with stakeholders was not clearly defined. In one instance, the internal services of the company took one month to configure a particular piece of software because the way communications were conducted with the stakeholders changed frequently.

It did not take me much thinking to figure out why these problems were occurring. All of the engineers involved in this project were competent in their respective fields so that was not where the problem lay. It was simply a communication problem. Unfortunately, this lack of communication between engineers is quite common. Recently, many major projects involving parties from different countries have encountered major delays due not only to technical problems but also to communication problems between different engineering teams. We have all heard about the problems between French and Germans building the giant A380 aircraft. Even more incredibly, in 1999 NASA lost a \$125 Mars orbiter because one engineering team used metric units while another used imperial units for a calculation. It is interesting to note that these communication problems occur independently of the financial resources of a project.

I have learnt two things from these experiences. The first is that many students have the wrong idea about the engineering field. Generally it is virtually impossible for today's engineer to stay tucked away in a corner like a mad scientist in the movies testing, simulating, or programming without exchanging or sharing work with colleagues. However, most future engineers are not aware of this. As a consequence, they are inclined to think that communication courses are not as



important as mathematics or electronics. Personally, I felt this way a year ago, but looking back, it was a mistake and I now realize that communication is sometimes neglected by engineers today and this can have dire consequences.

The second point is that taking into account the nationalities of the companies involved in an international project is a determining factor in its success and in turn your personal success in that project. If you have stakeholders from different countries, the possibility of having communication issues increases. Considering this point, it is unfortunate to see that young engineers are not trained to work in a multicultural environment. Simply learning another language is not sufficient to work in this context. Of course, this will allow you to communicate basic messages such as saying, 'Hello,' chatting about weekend activities, or the movies in the box office. However, since management methods are different from one country to another, it would be very worthwhile offering young engineers some intercultural management courses. Some people believe this is not necessary, since you can learn on the job. I disagree with this because the managers of the projects I mentioned previously certainly had a lot of experience, but it did not prevent them from making major communication mistakes.

Once again, these problems will likely occur more frequently in an international environment. However, not all engineers pursue international careers or management functions so this advice may not apply to everyone. However, for those who want to pursue these tracks and for current managers, these suggestions could be helpful as in many past cases it could have resulted in better integrated teams and saved a lot of money.

GOLD NEWS

From around the world

Region 1 STEPs It Up!

By Jignasa Ray
(Region 1 Southern Area GOLD Coordinator)

As the Chinese Philosopher Lao Tzu said, "The journey of a thousand miles begins with one STEP." That is where we begin our journey of retaining IEEE Student members once they complete their education and begin their careers. So what is STEP? The IEEE Student Transition and Elevation Plan (STEP) is the program developed to facilitate the transition of student members to young professionals and introducing them to the IEEE benefits and opportunities as they begin their careers.

I first learned of the STEP program in late 2008 at the conference call held by the R1 GOLD Coordinator, Uri Moszkowicz. He gave us a brief overview of the event held at [MIT in Boston](#) on April 12, 2008 and how the STEP program began in 2007. As a follow-up, Uri emailed the STEP Manual to all the R1 GOLD Chairs and encouraged them to

host a STEP event (also referred to as the GOLD Graduate Reception) in their local sections. So, what began as one event in 2008 in Region 1 has now been successfully implemented or planned for 2009 in New Hampshire, New York, North New Jersey, and Boston, each event with its own flavor for reaching out to the student members of their Section.

On May 26th, 2009, the New Hampshire GOLD/WIE joint affinity groups organized a luncheon at Libby's Bar and Grill in Durham, NH as a STEP program. Approximately ten students attended the event and enjoyed appetizers and lunch while discussing their post-graduation plans with the young professional engineers in attendance. This was the first year that a graduation luncheon was hosted by the NH WIE/GOLD, and they hope it will become an annual event. The organization of the event was lead by the GOLD/WIE Chair, Jennifer Shelly.

Another STEP event, the NY GOLD/SAC Graduate Reception was held at DeVry LIC in Queens, NY on October 15th, 2009 and followed a more traditional approach. The event began with a welcome message and video on IEEE membership benefits. Then, Balvinder Blah talked about the benefits of

IEEE membership and the importance of having a STEP program. Then the NY GOLD and SAC chairs gave an overview of local activities and introduced the various speakers to give testimony of their IEEE experience. The speakers included: Stephen Callender, a Polytechnic University graduate and NYC Transit employee; William Salazar, a DeVry College of New York graduate, and Franco George, a City College of New York graduate student.

This was just the first half of the event. After the testimonial speakers, the keynote speaker, Stanley Karoly, P.E., and Chief of Electrical Engineering at NYC Transit gave an engaging speech about the career planning tips and how to get involved in the local IEEE sections. Stanley Karoly is a long time member of the IEEE and has played an active role in the NY IEEE community. After the speeches, the STEP planning team thanked the speakers and gave a plaque for their contributions.

The NY SAC team recognized each Graduating Student by giving them a Certificate of Achievement and applauding their achievements. The evening concluded with drawing a winner for the raffle prize, followed by networking and pizza. Despite the rain





and horrible travel conditions, the event was successful with more than 25 attendees including students from DeVry LIC, Columbia University, College of Staten Island, The City College of New York, and Polytechnic Insti-

tute of NYU. This first STEP event by the NY Section GOLD/SAC was very successful. The NY STEP Event planning team included Balvinder Blah, Michael Haroutunian, Konal Kumar, Mawmita Khan, Jasvinder Blah, William Salazar and I. Before the end of the year, there will be two more STEP events held in Region 1. On November 12th, 2009, the Boston GOLD/SAC will have their Graduate Reception at [Boston University](#). The North New Jersey GOLD/SAC STEP event was held on November 18th, 2009 at the

[Stevens Institute of Technology](#) in Hoboken, NJ. Besides the local volunteers spearheading the STEP events, the IEEE Staff supporters for STEP Cathy Downer and Lara Fast have been instrumental in providing support and reviewing proposals for funding requests.

Now that you've heard about the various STEP events in Region 1, why not plan one of your own. The STEP Manual provides information on how to plan and organize workshop activities to reach out to the graduating students. The manual contains a check list, best practices, templates and additional resources on Membership Development. There is also information on how to apply for funding. All you need to get started is in the STEP manual that can be downloaded from the [STEP website](#). Let's STEP it up around the world!

Paris-Sharjah IEEE Exchange

By Salima Kaissi

On May 26 the IEEE Student Branch of the American University of Sharjah (AUS), UAE held their annual study trip abroad. After travel-

ling to Germany last year, France was their destination for 2009. During the trip, the students visited several companies in different French cities. While visiting Paris the IEEE France Section organised a meeting with the AUS students that was held in the Telecom Paris Engineering School. Besides students from the Telecom Paris Engineering School, some section officers also attended this event including the Section Chair, Mr. Daniel Pasquet, the Conferences Officer, Mr. Mohamed Ramdani, the Membership Officer,

Mr. Jaques Demerjan and the GOLD Affinity Group Chair, Ms. Salima Kaissi.

After the welcome speech by the Section Chair, the AUS Student Branch Chair, Mr. Yassir Al-Jundi, made an interesting presentation about the Student Branch at AUS and their many successful activities. At the end of the meeting, the AUS students presented certificates of gratitude and some Emirati dates, a delicacy in the UAE, to their hosts from the France Section.



STEP One Workshop in Croatia: A Success Story

By Kresimir Delac
(IEEE Croatia Section GOLD Chair)

Around 50 GOLDDies, graduate students and young professionals met at the first STEP (*Student Transition and Elevation Partnership*) event in Croatia in September. Croatia's GOLD/PA team joined forces with the Industry Relations officer and the Student Branch Zagreb and organized a workshop that proved to be a great success. Publicizing the event through various social networks (Facebook etc.) and personal contacts proved to be a good strategy for motivating young people to attend.

The event had two parts: the formal and the informal one. In the formal part, there were three invited speakers. Tomislav Pokrajic shared his experience in building a software start-up; Dusan Bogdanovic gave his personal view on the pros and cons of work-

ing in a large multinational corporation; and Kresimir Lugaric presented "ITI Student Lab", a project in which experienced professionals help and support young students to realize their ideas and projects in various

fields. Fruitful discussions took place between the audience and the speakers, and continued long into the informal part of the event (the break between the talks and after the event).

The social aspect of the whole event was something that we as organizers mostly focused on, as we tried to engage all the participants in discussions and experience sharing. Naturally, the many young people in attendance had millions of questions about their forthcoming careers and we can only



hope the discussions continued in some other form after the event. There were so many questions that there was little chance of answering all of them in that one event. The event lasted for about three hours during which all the drinks, snacks and other resources were exhausted.

Subjects frequently addressed were the benefits of IEEE membership after graduation and during the transition to professional life, and the volunteers that were present explained their perspective on this. The best proof that the event was a success came the following day when a non-member who had attended sent us an email informing us that she, after being on the STEP workshop the previous day, had decided to become a member of the IEEE.

But, above all other things, we are especially proud of the fact that three members asked to be involved as volunteers in organizing future events, and that one other IT industry professional asked if she could be a speaker and share her experiences in the next event.

And finally, it goes without saying that 'STEP one' means that there will certainly be a 'STEP two', planned for the first half of 2010.

**Comments on GOLD News?
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IEEE STEP Program Comes to Western Australia

By Timothy Wong
(IEEE Western Australia Section
GOLD Chair)

In Western Australia, there has recently been a significant shift in the labour market for students when they graduate. For many it can be a daunting experience not knowing what lies ahead in the short to long term of their career let alone securing a job. An IEEE STEP (Student Transition and Elevation Partnership) function was held on 22nd November 2009 at Valentino's Restaurant to help students gain a better understanding of what to expect in their professional career, equip them with the necessary skills to be successful and inform them of how the IEEE can enhance and assist their professional career.



There were three speakers who spoke on topics including moving from university to the workplace, IEEE and your professional career and the importance of networking. This was followed by a door prize draw and a 3 course dinner. All participants were presented with certificates of appreciation and an information package containing of IEEE freebies and information brochures. The event was an overall success with over 25 attendants who all provided positive comments on the feedback form. Funding for this event has been provided by the IEEE STEP initiative at the IEEE headquarters



level, the IEEE Western Australia Section and the IEEE GOLD Affinity Group in Western Australia.

The Broadcast Technology Society GOLD Activities

By Heidi Himmanen
(BTS GOLD representative)

Greetings, this is Heidi Himmanen from Finland, the new and first ever IEEE Broadcast Technology Society (BTS) GOLD representative. This year has been quite extraordinary for me. In addition to becoming involved in BTS activities, I have published my doctoral dissertation in telecommunications while staying at home with my 13-month-old son Esko. My research focus is in wireless broadcasting and I also contributed to writing the DVB-T2 (2nd generation terrestrial digital video broadcasting) standard.

Now, I have the pleasure of starting new GOLD activities in Broadcast



Heidi Himmanen,
Broadcast Technology
Society GOLD Representative

Technology Society. The GOLD activities in BTS are primarily intended for young professionals and student members but anyone interested in the activities is also welcome to join. The BTS plans to host many exciting GOLD activities and we will make sure to keep the BTS GOLD and student members informed about our activities. Social and networking skills are not taught at the Universities but are an important part of a professional development and one of the most important parts of the GOLD program is global networking with people in the same working field. Hence GOLD and society partnership is important to help young professionals grow. BTS GOLD aims to help young professionals engage in the worldwide engineering community through networking and other activities to become connected, motivated, and successful professionals.

BTS GOLD held its first event, a GOLD session at the IEEE International Broadband Multimedia System and Broadcasting Conference (BMSB'09) in Bilbao, Spain, in May 2009. More than 40 people attended the BTS GOLD session which included a short presentation about the GOLD program and planned BTS GOLD activities for the year. The presentation was followed by cocktails and a networking reception. The BTS GOLD received positive feedback from the members who were very enthusiastic about additional upcoming BTS activities for young professionals! While networking, many young professionals were able to gain important contacts, as well as valuable information to help them with their new careers.

Volunteering is another important method to gain contacts as well as management skills not taught in engineering schools. BTS GOLD is also working on creating a website and establishing a mailing list of BTS GOLD and student members. BTS also hopes to help members connect with different research teams and institutions in the field of broadcasting and broadband multimedia for additional networking, and to support young engineers in finding research co-operation and job. We hope to extend this program further into an exchange program to provide opportunities for

young professionals to gain opportunities of working abroad. BTS GOLD further plans to continue hosting additional GOLD events at the annual BMSB conferences.

To stay informed about additional upcoming BTS GOLD activities, please e-mail k.colabaugh@ieee.org to be added to the e-mailing list. For more information or to

contact the author you can email heidi.himmanen@ieee.org

The BTS GOLD is looking forward to your active participation!

Photos: Region 1 GOLD Whitewater Rafting

By Jennifer Schelly
(New Hampshire GOLD-WIE Joint Affinity Group Chair)

On October 2, Region 1 GOLD hosted a white water rafting event on the Deerfield River in Massachusetts, USA. There were also a number of attendees from the New Hampshire WIE-GOLD Joint Affinity Group. It was a rainy and dreary day so almost everyone rented wet

suits or wore very warm clothing. The trip was terrific fun and saw several groups of IEEE members bravely raft down rapids of increasing difficulty level. The highlight of the day was an area called Zoar Gap, which required some skill to navigate successfully. Fortunately, none of the participants ended

up in the water thanks to the prudent instruction of our guide. The day ended with a barbeque back at the base camp where everyone enjoyed the warm drinks and lively conversation before departing.



North Saskatchewan GOLD Industry BBQ

By Terence Monteith
(IEEE NSS GOLD committee
member)

On July 14, 2009 the GOLD committee of the IEEE North Saskatchewan Section hosted an industry BBQ for Saskatoon and area IEEE members and recent university graduates. The mandate of the industry BBQ is to bring together recent electrical engineering graduates with established electrical engineers from local industry. The setting is an informal affair, where people can mix and mingle.

This was the second annual Industry BBQ held. Last year expenses were covered through corporate sponsorship. This year expenses were covered by both the IEEE STEP program and the North Saskatchewan Section. As this was the 125th anniversary of the IEEE, the GOLD committee tied this into the BBQ event as well.

Weather threatened to hamper the outdoor space the GOLD committee had rented to host the BBQ. As a result, the event was

moved to an indoor hall. Though the weather was not the most cooperative, a sizeable crowd did turn out. Last year's event drew 70 people, but we exceeded that amount this year with 75 people attending. Of the 70 people, only 7 were student members of the IEEE that graduated this past spring. The goal was to attract at least 10 graduating student members.

At least 17 companies and institutions were represented at the BBQ. Company industries included: utilities, education, telecommunications, agricultural instrumentation, software, and consulting. There was a good mix of recent graduates and senior level people attending the event. Several members of the IEEE North Saskatchewan Section Executive were also in attendance representing their respective companies.



IEEE Commemorative Cake

The only formal portions of the event were two speeches. The first was provided by Kris Breen (chair of the GOLD committee) extolling the benefits of the IEEE and encouraging recent graduates to maintain their memberships. The second was provided by Jeremy Gates (president of the North Saskatchewan Section). Mr. Gates reiterated the value of the IEEE. He also made the dedication of a cake specially obtained to commemorate the 125th anniversary of the IEEE.

Overall, the GOLD committee was very satisfied with the turnout of the Industry BBQ (a 7% increase over last year), especially since the weather was not very conducive to a BBQ event. However, the committee was disappointed in the turnout of 2009 IEEE graduates, especially since STEP provided funding for the event. It will be a goal of the committee to try to reach out further to this group for the 2010 event.

The GOLD committee wishes to acknowledge the generous financial contributions provided by the IEEE STEP program and the IEEE North Saskatchewan Section.



Attendees of the GOLD Industry BBQ 2009

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

Photos: Region 1 Professional Development Seminar

The annual IEEE Region 1 WIE Professional Development Seminar was held from September 25-27 at the Crowne Plaza Hotel, White Plains, New York, USA. The theme for the event was:

"Engineer the Future, Sharpen your Competitive Edge". The conference offered a great selection of professional seminars and workshops including "Developing Leadership Skills", "Emotional Intelligence" and

"Working in the 21st Century". There were also ample networking opportunities, invited speakers and exhibits from a range of organizations including Google.



The Humanitarian Technology Fund Awards Two New Grants

By Margot Prendergast

Non-profit organizations, like IEEE, set up charitable foundations. Foundations seek funding,

but they also invest, manage and distribute those funds through grants and awards. Foundations either donate funds to support other organizations, or provide the sole source of funding for their own charitable activities. The IEEE Foundation, Inc., the philanthropic arm of IEEE, has the exclusive role of supporting the scientific and technical innovations of IEEE. Therefore, the IEEE Foundation is responsible for raising money, and distributing those monies in support of philanthropic activities, a lot of

which are geared toward young professionals.

Originally, the primary function of the IEEE Foundation was to accept and administer charitable donations for IEEE Awards. As the Foundation grew and member interest in its endeavors broadened, so did the generous giving of donors. The IEEE Foundation expanded its scope to include the establishment of funds, and the awarding of grants to new and innovative projects.

In celebration of IEEE's 125th anniversary, the IEEE Foundation established the

Humanitarian Technology Fund (HTF). The HTF supports the development and implementation of ventures to address the world's most pressing challenges, particularly in developing countries. The HTF actively seeks donations and awards grants for projects that provide sustainable technological solutions to humanitarian challenges. To learn more about how to apply for a grant, go to www.ieeefoundation.org.

In June 2009 the Foundation approved the first two grants to be administered through the HTF. The Brown University Engineers Without Borders Chapter was awarded US\$15,000 to help fund the Rainwater for Humanity project in Kuttanad, India. The project entails the construction of rainwater storage reservoirs and catchment systems with built-in purification devices to capture rain from existing rooftops. Each structure provides a family with a year's worth of clean water, reducing both diseases caused by water pollution as well as the burden of fetching water.

The Foundation also administered US\$4,000 to Virginia State University to help support its Wireless Messaging Device for Disaster Relief. The project is intended to combat instances of communication failure that hinder relief efforts during natural or man-made disasters. It can deliver instant messages from federal agencies to portable, low-cost, waterproof devices that can be op-

erated by batteries and small solar cells for a month in disaster areas without electricity or existing communications infrastructure.

The HTF is complemented by the Hu-

'The [Humanitarian Technology Fund] supports the development and implementation of ventures to address the world's most pressing challenges, particularly in developing countries.'

manitarian Technology Challenge (HTC) and the associated Humanitarian Technology Network (HTN). The HTN is a partnership with United Nations Foundation to bring a systematic approach to applying technology to solve world problems. This online, open-source platform allows technologists, humanitarians, students and government employees to share ideas and feedback in real time; contribute content through edits and uploads; and participate in Web brainstorming sessions. Three primary challenges were identified—reliable electricity, data connectivity of rural district health offices, and patient identi-

fication tied to health records. To find out more, visit www.ieee.org/go/htc.

The HTN, launched in March 2009, provides a multimedia, interactive database platform for communication and collaboration amongst humanitarians, technologists, foundations and corporations. The network, a wiki-based repository of implemented projects and ideas using technology to solve humanitarian problems, enables input by IEEE members through IEEE Web accounts. The HTN encourages young professionals who are eager to improve the quality of life in the global community to visit www.ieeehtn.org and submit their ideas.

The IEEE Foundation also supports humanitarian programs initiated by IEEE GOLD. Following the IEEE GOLD Humanitarian Workshop held in October 2008 at Boston University, attendees were invited to apply for one of 10 IEEE GOLD Humanitarian Fellowships. The IEEE Foundation, the primary sponsor of the fellowship, granted US\$30,000 to launch the initiative. Recipients were awarded grants of up to US\$3,000 to advance humanitarian project proposals in developing and developed countries. Fellowship grants awarded in 2009 included a project to develop a mobile technology for drugs authentication in Ghana.

The IEEE Foundation, through the altruism and generosity of its members and others, provides young professionals with a number

of opportunities to enhance their engineering experience and broaden their involvement in IEEE. In advancing IEEE's core purpose to foster technological innovation and excellence for the benefit of humanity, the Foundation emphasizes projects designed to improve people's lives worldwide. Graduates of the last decade are particularly valuable to these humanitarian initiatives.



The IEEE Humanitarian Technology Fund, run by the IEEE Foundation, has helped to kick-start many humanitarian projects around the world.

Tokyo GOLD Holds IEEE 125th Anniversary Essay Contest

By Yasuharu Ohgoe (Tokyo GOLD Chair) and Alex Fung (Tokyo GOLD Secretary)

IEEE Tokyo GOLD and IEEE Japan Council Women in Engineering (JCWIE) recently organized the "Career Development Essay Contest" to celebrate the 125th Anniversary of IEEE. This contest was aimed at young professionals, in particular female engineers, but was also open to students. The contest's purpose was to raise awareness of possible career paths for young professional members, to provide them with the relevant skills and to encourage them to share their experiences. Entrants were encouraged to consider questions like, "How can I shape my career?", "How can I envision my future dreams?", "How can I get the most enjoyment out of my life as a young professional?" and "What benefits does IEEE offer that could help me develop my career and my skills?"

The contest attracted entries from fifteen authors, including a mix of members and non

-members. The authors expressed their vision for the future of their lives, including examples of possible experiences and activities. First prize went to Nadia Mei Lin from the Tokyo Institute of Technology for her essay entitled, 'My Story: Realizing a Childhood

Dream'. Nadia wrote about how she considered several different careers including becoming a teacher, a doctor and a singer. Finally she became an Engineer against her father's advice that an accounting job would be more suitable for a female. She treated this as a challenge. By studying and working in different environments, she gained supports from peers and through her experiences as an IEEE member, she gained chances to network with people in the same field. Nadia's essay won the contest on the basis of its logical flow combined with strong emotions, and because of its foundation on her interesting life experiences.

There were five runners up whose essays were highly commended: Muhammad Sury-



The winners with IEEE President John Vig

anegara, Kan Akutsu, Kazuyuki Sudoh, Mika Muraoka and Yu Kurosawa. These essays also focused on raising awareness of potential career paths for young professionals and the relevant skills required. The winners of the essay contest were invited to attend the IEEE 125th Anniversary Celebration in Tokyo on 23rd October, with their prizes to be presented at the event. Through the contest we hope to encourage members to take a broader view of their careers. The winning essays can be viewed on our website at <http://www.ieee-ip.org/tokyogold/html/EssayContest2009Result.html>

Upcoming GOLD Webinars

IEEE GOLD is offering a number of great webinars for free to members over the next few months. Following is a summary of the next three webinars. For further details and to register, please visit <http://www.ieee.org/web/membership/gold/events/index.html>

Geek in the Lead: Growing from Engineer to Manager — presented by Dr. B. Michael

Aucoin, PE, PMP.
Wednesday, 16 December 2009, 11:00am EST.
[Register online now.](#)

A Survival Guide for Scientific Writing in the Academic and Professional Environments — presented by Dr. Matthias Reumann.
Thursday, 21 January 2010, 11:00am EST. [Register online now.](#)



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Two Brains Are Better Than One: Right-Brained Leadership for Projects — presented by Dr. B. Michael Aucoin, PE, PMP.
Wednesday, 17 February 2010, 11:00am EST. [Register online now.](#)

NOTICES

Boston GOLD 10th Anniversary Celebrations

By Greg Walson
(2009 IEEE Boston GOLD Chair)

The IEEE Boston GOLD Affinity Group will be celebrating its 10th Anniversary in 2010. As one of the oldest and largest GOLD chapters, we are looking forward to welcoming former, current and future members to a gala celebration in January; keep an eye on our website for more details as they become available (www.ieee.org/go/bostongold)



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Call for Articles: GOLDRush March Edition

IEEE GOLDRush invites you to submit an article for publication in the March 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 5 February 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!



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Graduates Of the Last Decade

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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

Teodor Buburuzan

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

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