The Valley Megaphone

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Contents:

IEEE Phoenix Section Executive Committee meeting minutes can be found at:
http://www.ieee.org/phoenix

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U – News

(for Student Members)

Since our Students Activities Chair, Nick Leonardi, is pre-occupied with his work, I have the honor of writing to you this month.

The summer months are relatively quiet for IEEE Phoenix, as our local chapters usually go on their summer hiatus. Even the executive committee meetings of the IEEE Phoenix Section will not happen in July and August.

However, the IEEE Phoenix Section is organizing a Workshop on August 1, 2009 on "Job Search" strategy. Even though, this workshop is primarily tailored for engineers who are displaced due to the current hard economic conditions, I believe, our outgoing student members also can learn a few tips from this timely workshop for their job search.

For more details on this workshop, please read the workshop announcement on page 4 of this newsletter.

Regards,
Sam Karikalan
Publicity Chair – IEEE Phoenix Section
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U-Newsbytes

- There are no Executive Committee meetings scheduled for the month of July and August. So, the next round of student reports is due on August 28th.

- Student Chapter Officers are in the process of filling officer positions being vacated by graduating students. Student Chapter activity will resume for 2009 - 2010 school year and newly elected officers (and returning officers) are to be listed in monthly reports.

- ASU IEEE Computer Society collaborates with Sun Microsystem's Open Source University Meetup (OSUM) Program. Sign-up Today! (Page 3).

Call for IEEE Phoenix Section Officer Nominations

The IEEE Phoenix Section is seeking nominations for the following Section Officer positions for the 2010 term:

- ❖ Chair,
- ❖ Vice-Chair,
- ❖ Secretary and
- ❖ Treasurer

Please send your nominations or questions to any of the following Nomination Committee members:

Keith Holbert (email: holbert@asu.edu),
Bob Paris (email: bob@arizonasunsales.com), or
Vasu Atluri (email: vpatluri@ieee.org)

Section Officers may be of Member, Senior Member, or Fellow grade, and must reside within the boundaries of the Phoenix Section. Self-nominations are perfectly acceptable.

IEEE Computer Society at ASU

Open Source University Meetup

IEEE Computer Society at Arizona State University has a history of dedication to collaboration and innovation, and is a firm believer in the power of open source software. We are also passionate about helping our students network and succeed. In this spirit, we are proud to announce collaboration with Sun Microsystems and their Open Source University Meetup (OSUM) program!

Sun Microsystems has rapidly emerged as a leader in the open source community, making a large variety of their platforms open including OpenOffice, OpenSolaris, OpenJDK, and even OpenSPARC. You know a company is serious about open source when it makes its hardware open! In their passion for open source, they have created a community called the Open Source University Meetup which exists as a social networking tool for developers to meet others who are passionate about open source and learn more about Sun technologies. Members of the OSUM community include students from all around the world, Sun staff, and any developer who has a passion for expanding his or her own knowledgebase.

Beyond the obvious networking opportunities, members of OSUM also get free, well-written and authoritative training on Sun technologies through the Sun Academic Initiative, and *extremely* reduced-cost sun certification exams! This is an amazing deal for those seeking to enhance their skill-set or prove that they have mastered a particular tool, and the best part is it's free and easy!

So what are you waiting for, an invitation? Well, here it is: go to http://osum.sun.com to sign up. Need more information? Please contact Nicholas Vaidyanathan at Nicholas.Vaidyanathan@asu.edu.

IEEE-Phoenix Section

Workshop

A PROFESSIONAL CHALLENGE: Your Job Search

Saturday, August 1, 2009

10:00 AM – 1:00 PM

Mustang Library Auditorium, 10101 N 90th St, Scottsdale, AZ 85258

The Valley job market is evolving. There are many companies downsizing, discontinuing or relocating, re-engineering their organization or otherwise impacted by economic conditions. In addition, there are new opportunities created by emerging technologies, business births, economic development and other factors.

The challenge for the displaced engineer or the individual searching for a new opportunity is how to effectively identify/qualify job leads and hiring organizations, develop an effective resume/job application package, and have a successful interview.

The Job Search workshop will go through each phase of your job transition including: preparation, search, contact, interview, selection, and growth.
Major workshop topics include:
- Personal SWOT analysis
- Resume development
- Networking
- Market analysis
- Search (industry and market)
- Interviewing (competency based and technical)
- Follow-up

In this three-hour workshop, you will:
- Identify and analyze your attributes, interests, skills and accomplishments and the impact you can make on an organization
- Develop a competency based resume and companion introduction letter
- Determine methods for making effective contacts and distributing your materials
- Identify of the different resources and personal networks that can be used in your job search
- Discuss elements of effective interviewing, including competency-based interviews, technical interviews and interview scoring
- Identify personal improvement opportunities and options
- Develop a marketing and tracking plan for all applications, interviews and feedback.

Registration

The registration fee for the program is $10.00, payable to the IEEE-Phoenix Section. Registration and course related questions should be made directly to Michael Andrews, m.andrews@ieee.org. Registration is limited.

Participants must bring an existing resume and current work history (soft copy and hard copy). You may bring a personal computer (optional).

Power & Energy Society Announcements

June through August 2009

Summer Break: No PES Phoenix Chapter Meetings will be held.

September 2009 Technical Meeting

Date: Thursday, September 17, 2009

Location: SPR PERA Club. Map -
http://ewh.ieee.org/soc/pes/phoenix/images/PERAMAP.pdf

Speaker: Clark Jones

Topic: Residential Solar Generation from one customer's perspective. See PES
               website for more information as it becomes available
               http://ewh.ieee.org/soc/pes/phoenix/

September 2009 52nd Annual IEEE PES Phoenix Chapter Golf Tournament

Date: Saturday, September 26th, 2009

Location: Antelope Hills Golf Club, Prescott

Come join over a hundred other golfers for a great day out on the greens, followed
by a banquet dinner with cash and prize giveaways.

For more information, please contact the PES Vice-chair Bruce Ladewig at
Ladewig@wapa.gov.

IEEE Fellow Kristina Johnson Confirmed as U.S. Undersecretary of Energy

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PISCATAWAY, N.J. – June 23, 2009 –IEEE, the world's largest technical professional association, is proud to announce that IEEE Fellow Kristina M. Johnson has been selected by President Barack Obama and confirmed by the U.S. Senate as the Undersecretary of Energy. In her new role, effective July 1, 2009, Johnson will be responsible for leading administration initiatives focused on energy efficiency, solar and wind power, geothermal energy, clean car technology and other forms of renewable energy. In this role, Johnson will draw upon many of the key learnings she experienced since joining the IEEE as a student member in 1980. Throughout her lengthy membership, Johnson has actively been involved in a number of Societies and Committees, using the many avenues for growth available throughout the IEEE to catapult her to where she is today. She is currently an active member of IEEE's Electron Devices Society, Photonics Society and Women in Engineering.

"IEEE is extremely proud to have an IEEE fellow, one of the IEEE's most distinguished members, selected for such a prestigious position within the President's administration," said Leah Jamieson, 2007 IEEE president and John A. Edwardson Dean of the College of Engineering, Purdue University. "On a personal note, I'm thrilled at the success of an esteemed colleague and one of IEEE's most accomplished women. Kristina has been a member of the IEEE for nearly 30 years. Her appointment underscores IEEE's relevance in tracking global grand challenges."

Johnson's longtime affiliation with IEEE has impacted many of her accomplishments to date providing her with the networking and resources necessary for success. An electrical engineer, Johnson has more than 129 U.S. and foreign patents or patents pending. Her inventions include pioneering work on liquid crystal on silicon (LCOS) microdisplays and their integration into demonstration and commercial systems such as heads-up automotive displays (HUD); pattern recognition systems for cancer prescreening, object tracking and document processing; HDTV and 3D projection displays; and 3D holographic memories. She earned degrees from Stanford University including a Ph.D. in 1984 and both a bachelor's and a master's degree in electrical engineering in 1981. Johnson became an IEEE Fellow in 2002, one of IEEE's highest honors.

"Addressing today's most pressing energy challenges is a high priority within IEEE as progress is essential to achieving a more sustainable world," said Wanda Reder, President, IEEE Power & Energy Society and IEEE's New Technology Directions Committee (NTDC) Smart Grid Chair. "Kristina's appointment solidifies the role IEEE plays in dealing with these issues head on. We are confident that Kristina will continue to promote innovation and address key issues surrounding sustainability as they relate to renewable power supplies, the smart grid and reducing foreign dependence on oil."

Johnson will be leaving her position as provost and senior vice president for academic affairs of Johns Hopkins University to fulfill the position as Undersecretary of Energy. Previously, she held the position of dean of Duke University's Pratt School of Engineering from 1999-2007 where she helped set up interdisciplinary efforts in photonics, bioengineering and biologically inspired materials, and energy and the environment.

If you are looking to speak with IEEE about Kristina Johnson's appointment or other sustainability topics, please contact IEEE at ieee-PR@ruderfinn.com.

About IEEE

IEEE (Institute of Electrical and Electronics Engineers, Inc.), the world's largest technical professional society, is commemorating its 125thanniversary in 2009 by "Celebrating 125 Years of Engineering the Future" around the globe. Through its more than 375,000 members in 160 countries, IEEE is a leading authority on a wide variety of areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power and consumer electronics. Dedicated to the advancement of technology, IEEE publishes 30 percent of the world's literature in the electrical and electronics engineering and computer science fields, and has developed nearly 900 active industry standards. The organization annually sponsors more than 850 conferences worldwide. Additional information about IEEE can be found at http://www.ieee.org.

IEEE Strategies to Help School Science Teachers

The national office of the IEEE has had an active program for a couple of years now to train science teachers in improved ways to teach science and engineering to school children. Called **TISP – Teacher In-Service Program** – the program is a response by the institute to the widely acknowledged appallingly low quality of science and mathematics knowledge among graduating school children, and the rapidly decreasing number of students who opt for a degree and a career in engineering rather than in business management, finance or law. The institute recognizes that a large part of the problem is the lack of knowledge and experience of engineering matters among the science teachers, this leading to a lack of exposure of children at a young age to real science or the encouragement of any child that might have an interest. In fact, studies show if children have not been exposed to science before high school it is really too late for them to get into it. Along with that, by 5th grade students need to know that going to college is a possibility for them.

Hence, a major part of the national IEEE program is the creation of a growing set of teaching modules / lessons plans, each module being structured around a particular engineering problem such as electric motors, structure loads, etc. Each module emphasizes the teaching of the relevant engineering, science and mathematics principles through a practical project performed by the students. These modules are freely available to any teacher on the institute website: www.tryengineering.org/lesson.php.

The TISP program is an effort sponsored and promoted by the national office but run at the local chapter level. The Phoenix Section lead on TISP is Mike Poggie. To further help the process, the national office has been running a series of workshops to train IEEE member volunteers in achieving two goals: to train teachers in better ways to teach engineering and science principles, and to provide in classroom assistance to the science and mathematics teachers. A small group from the Phoenix Section participated in the last session in November held in San Francisco; it was a lot of fun and very inspiring! But it is clear that to manage and implement TISP over the whole Phoenix Section, we have to divide up the tasks into manageable subsets, each subset under a different lead and all the subsets coordinated by Mike Poggie. A subset could be a distinct grouping such as retirees, or a town remote from Phoenix like Flagstaff, or even quite possibly a particular school.

As a first subset we are seeking to enlist the help of the talented retirees in the IEEE. Retirees represent a tremendous pool of engineering talent and knowledge associated with its application in the real world of industry, academia, government, etc. They are very capable of being able to show school children in science classes how what they are being taught relates to the real world and how science and math studies can lead to a fruitful and enjoyable career in engineering. Plus they have more time they can devote to this cause than do our colleagues in full-time employment and with young families. This subset is being organized by John Purchase. So any retiree interested in joining this effort should please email John Purchase at: jpurchase@cox.net.

Plus any non-retiree interested in helping the Chapter's TISP effort should get in touch with Mike Poggie at: Mike.Poggie@ieee.org. And the national office continues to run regular TISP workshops (and all travel expenses are reimbursed!); they are well worth attending for anyone interested in working with school children and teachers.

Please read the June 2009 edition of the Valley Megaphone at http://ewh.ieee.org/r6/phoenix/vm/2009/June09vm.pdf, for a glimpse of the contributions by the IEEE Phoenix TISP volunteers.

IEEE Mentoring Connection

IEEE is offering its members the opportunity to participate in an online program which will facilitate the matching of IEEE members for the purpose of establishing a mentoring partnership. By volunteering as a mentor, individuals use their career and life experiences to help other IEEE members in their professional development.   I believe this program can be a great tool to provide our newest members of our profession guidance in their careers and provide experienced members a chance to hear first hand from the newly graduated about the latest training the next generation is receiving. This is a program for higher level members and is provided to help ease the transition out of school and into a career.

As a mentee, you lead your partnership by selecting your mentoring partner from among those who have volunteered to serve in this capacity. I ask that you review the time and effort commitment to the program to ensure a successful mentoring partnership. Participation in the program is voluntary and open to all IEEE members above the grade of Student Member.

If you are interested, please go to http://www.ieee.org/mentoring for information on the roles and responsibilities of each mentoring partner. I encourage you to take advantage of the IEEE network of technical professionals or offer your expertise and sign up for the online mentoring program today.

Who can be an IEEE Mentor?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:
- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Able to communicate effectively with others
- Willing to share some career successes and failures
- Individuals who may be or have been executives, consultants, or in middle or upper management, or in research
- Individuals who may be or have been educators, entrepreneurs, or self-employed
- Individuals who may be or have been proven leaders offering inspiration and insight
- Individuals who may be or have been IEEE officers or volunteers
- Willing to review an orientation session to learn guidelines, tools of program and the mentee and mentor's role and responsibilities

Who can be an IEEE Mentee?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:
- New professionals in their first or second job, or considering entering graduate programs
- Recent graduates entering the professional workforce for the first time
- Professional making a career move or career change
- Passionate for learning
- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Willing to identify and clarify their developmental goals
- Interested in learning from another professional "who has been there"
- Willing to participate in mentee orientation session to learn guidelines, and tools of program and their role and responsibilities as a mentee

This program deserves your consideration and doesn't require a large amount of time on your part. It can provide of great assistance to the next generation of engineers.

Russ Kinner
Conferences Chair, Phoenix Section

RE-SEED

Retirees Enhancing Science Education through Experiments & Demonstrations

Overview

RE-SEED (Retirees Enhancing Science Education through Experiments and Demonstrations) is a Northeastern University program that prepares engineers, scientists, and other individuals with science backgrounds to work as volunteers, providing in-classroom support to upper elementary and middle school science teachers with teaching the physical sciences.

After completing a comprehensive free training program, participants volunteer in middle school classrooms on the average once a week for at least one year. RE-SEED began in 1991 with six volunteers. To date close to 500 RE-SEED volunteers have worked in schools in about 100 communities throughout the country offering about 500,000 hours of their time.

Nationally, 75 percent of 7th and 8th grade students are taught physical science by teachers who do not have a major or a minor in the subject (The National Science Board, Science and Engineering Indicators 2000). RE-SEED volunteers possess talent and expertise that complement those of science teachers. They bring with them a wealth of knowledge and experience that allows them to make science interesting and relevant to everyday situations.

RE-SEED volunteers work closely with the host science teachers to help them enrich and implement their school curriculum. Overall the volunteers become involved members of their schools' and even their districts' teaching team, sometimes taking part in curriculum adoption decisions.

Please contact us by email at reseed@neu.edu or phone 888-742-2424; Shelia Kirsch at Sheila.Kirsch@asu.edu and / or Deirdre Weedon, d.weedon@neu.edu. if you are interested in learning more about these training programs.

Phoenix Section Executive Committee Meeting
– First Tuesday of the month.

No Meetings in July and August

Venue: Phoenix Airport Hilton, 2435 S 47th St, Phoenix, AZ, 85034 Tel.: 480-804-6017

More Info: Meetings are held on the first Tuesday of the month. All interested IEEE members are welcome to attend.

Contact: Debendra Mallik, Phoenix Section Chairman, dmallik@ieee.org

IEEE Phoenix - Calendar of Events for July 2009:

You may access the IEEE Phoenix Section Calendar of Events at
http://www.mynetcalendar.com/calendar.php?month=7&year=2009&calendarid=2400

For inputs and updates to the Calendar, please contact the IEEE Phoenix Section Conferences Chair, Russ Kinner at 602-997-2353 or e-mail: r.kinner@ieee.org

IEEE's 125th Anniversary Events

Calendar of Worldwide Events to celebrate IEEE's 125th Anniversary is available at
http://www.ieee125.org/celebrate/events/calendar/index.html