



Buffalo Section Electrifying News

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If you would like to contribute thoughts or articles please send them to
sec.buffalo@ieee.org
Editor: J. L. Zirnheld
Associate Editor: Jason L. Cieri

The IEEE Buffalo Section is searching out new members to assist with executive duties on the board. If there are any members interested in becoming officers or assisting please send an e-mail to:

sec.buffalo@IEEE.org

Hold These Dates:

March 20, 2008

- Joint with Technical Societies Council

New Officers:

- **Chair:** Jennifer L. Zirnheld
- **Vice Chair:** Thomas M. Heckmann
- **Treasurer:** R. Kent Roberts
- **Secretary:** Judy Moskal

Volunteer Members Needed

Members from the IEEE Buffalo Section are needed for volunteer work. Members who may have once been an integral part of IEEE, but now have passed on their duties to other members are preferred. Tasks that you may be required to perform include, but are not limited to; organizing events, website management, making reservations or speaking in public. Your help would be greatly appreciated. Also the IEEE Buffalo Section is in need of new board of director members. The time commitment is approximately six hours per month. This time can roughly be broken down into an hour monthly board meeting and a four hour section meeting. There are vast opportunities to network through the Western New York area. Additionally, IEEE can issue a letter to your employer about the work that you have done. If you are looking to give yourself and advantage over your fellow electrical engineers, think about becoming an officer today. If you have questions, contact me at;

sec.buffalo@ieee.org or (716) 645-3115 x1216.

Senior Member Grade

Senior Member is the highest grade for which IEEE members can apply. To be eligible for application, candidates must: be engineers, scientists, educators, technical executives, or originators in IEEE-designated fields; have experience reflecting professional maturity; have been in professional practice for at least ten years; show "significant performance" over a period of at least five of their years in professional practice. For a look at more detailed requirements, see.

<http://www.ieee.org/web/membership/senior-members/requirements.html>

Benefits of Senior Membership

- **Recognition:** The professional recognition of your peers for technical and professional excellence.
- **Senior Member Plaque:** Since January 1999, all newly elevated Senior Members have received an engraved Senior Member plaque to be proudly displayed for colleagues, clients and employers to see. The plaque, an attractive fine wood with bronze engraving, is sent within six to eight weeks after elevation.
- **US\$25 Coupon:** IEEE will recognize all newly elevated Senior Members with a coupon worth up to US\$25. This coupon can be used to join one new IEEE Society. The coupon expires on 31 December of the year in which it is received.
- **Letter of Commendation:** A letter of commendation will be sent to your employer on the achievement of Senior member grade (upon the request of the newly elected Senior Member).
- **Announcements:** Announcement of elevation can be made in Section/Society and/or local newsletters, newspapers and notices.
- **Leadership Eligibility:** Senior Members are eligible to hold executive IEEE volunteer positions.
- **Ability to Refer Other Candidates:** Senior Members can serve as a reference for other applicants for Senior Membership.
- **Review Panel:** Senior Members are invited to be on the panel to review Senior Member applications.

Prospective members who would like to apply directly for Senior Member grade should visit

<http://www.ieee.org/web/membership/senior-members/application.html> with payment.

The Buffalo Section is willing to help if you want to be a section member but don't know where to start. If you have questions, contact; sec.buffalo@ieee.org

Engineering in Medicine and Biology Society

The changing nature of the health care and biomedical industries may bring additional growth opportunities to this area. As a result, the Buffalo Region would like to provide a local forum to explore synergies between technology and industry.

The IEEE Buffalo Section Region 1 currently has members who are also members of the Engineering in Medicine and Biology Society (EMBS). The University of Buffalo, Roswell Park Cancer Institute, Hauptman Woodward Medical Institute as well as other local biomedical companies are investing in many biomedical and engineering applications.

In order to maximize the Buffalo region's advances and to collaborate and share thoughts, ideas and solutions, we would propose establishing a Buffalo Chapter of EMBS.

We need your help. In order to begin the chapter, we will need the approval of current members. You can indicate your approval by completing the letter enclosed with this newsletter. The letter should be sent to the Buffalo Section address at 1045 Colvin Blvd, Buffalo, NY 14223, prior to March 15, 2008.

In the past, we have tried to establish this group but came up a few members short – please think of helping us again.

Should you have any questions, please call me at (716) 645-3115 x1216 or email me at zirnheld@eng.buffalo.edu

How to Respond to Offbeat Interview Questions

Some companies make it a policy for interviewers to ask job candidates weird questions like "What would you do with a million dollars?" to see if they can think on their feet or remain poised when faced with a question they couldn't possibly have prepared for. Others ask inappropriate personal questions related to the candidate's religion, physical appearance, or marital status. Though these are clearly out of bounds, recruiters say that you should keep your cool. They say there is almost always an answer that steers the conversation back to the job requirements and your qualifications. In a Wall Street Journal, career experts discuss how to shoot back when hit with oddball queries. Read on at:

http://www.careerjournal.com/jobhunting/interviewing/20071029-needleman.html?cjpos=home_whatsnew_major

Terraforming Mars

The idea of transforming a dead world into a living one has been long consigned to the pages of sci-fi stories. Now, real scientists believe they can make

fiction come to life in the future -- on Mars. And it's more complicated than just duplicating the global warming phenomenon of this planet. Read more at: <http://www.spectrum.ieee.org/nov07/5676>

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Hear the Headhunter Out

No matter how secure you feel in your current position, you never know when you may someday depend on a corporate headhunter to move your career upstream. So it makes good sense to develop a relationship with one now. It's definitely worth your while to respond to a headhunter's calls and listen to what he or she has to say. Though you have the right not to return their calls, be mindful that headhunters, who are frequently in a position to return favors, always value information providers. But a Business Week article cautions against sharing too much inside information. You don't want to be labeled a corporate mole. "Just ask yourself," advises the article, "With whom else besides this headhunter would I even be tempted to share such sensitive information?" For more on establishing a symbiotic relationship with a headhunter, see: http://www.businessweek.com/managing/content/oct2007/ca20071025_877915.htm?chan=careers_managing+your+career+page_top+stories

The Slashdot Supremacy

For a decade, one Web site has focused the interests of technophiles into a community unlike any other. Today, if you have to ask what Slashdot is, you're geek cred is nonexistent. Still, for the newbies of the

world, we present a profile of the man who started it all, Commander Taco himself, Rob Malda. Read more at: <http://www.spectrum.ieee.org/nov07/5639>

IEEE-Backed 'Design Squad' to be Featured on 'Jeopardy!' TV Game Show

WASHINGTON (22 January 2008) On Monday, 18 February, the long running television program "Jeopardy!" will feature a category devoted entirely to "Design Squad," the reality television show for youngsters funded by the IEEE and other groups, as part of "Jeopardy's" Teen Tournament Week. Footage from "Design Squad's" first season will be used to test contestants' knowledge of basic engineering concepts through a series of questions co-developed by "Design Squad" and "Jeopardy!" producers. Host Alex Trebek will introduce the category and encourage viewers to find the program on PBS. The "Design Squad" logo will also be featured as the category header.

The air date of the "Design Squad" episode is timed to coincide with National Engineers Week which takes place 17-23 February. The Teen Tournament series is one of "Jeopardy's" top-rated programs each year. NBC's "Jeopardy!" has an average daily viewership of 12,000,000.

"Design Squad" will begin its second season on PBS this April. The IEEE is continuing its second year of funding support for the program that features two teams of high-school students led by two young professional engineers who compete to solve a new engineering challenge each week. The program also incorporates educational materials distributed in local communities' activities and on a Web site.

Market research provided by WGBH, which produces the program, has shown that 10- and 11-year-olds who watch "Design Squad" have increased their understanding of the design process, reconsidered stereotypes about engineering, and know more about engineering and science concepts. To view past and current episodes, go to: <http://pbskids.org/designsquad/>.

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Don't Miss November's IEEE Spectrum Tech Insiders Webinars

Portable Designs with High-Power Batteries and Chargers New high-power batteries support pulses over 100 amps, enabling many new portable applications. On 7 November, learn from industry specialists about design considerations, guidelines, and enhancements that harness the power produced by these batteries. Don't miss this Webinar. Register now at: <http://www.spectrum.ieee.org/webcast/5529>

Data Collection in Today's Healthcare Environment In today's new OEM designs for the healthcare industry, enhanced data collection can reduce errors and provide security and safety for patients. Learn from industry experts how to create practical solutions with enough value-added technology and features to differentiate your products while meeting the goals of a variety of real-world applications. Register now at: <http://www.spectrum.ieee.org/webcast/5556>

Keeping Your Head Up During a Job Search

Job hunting is hard. And months of uncertainty and outright rejection can take a toll on your psyche. So how do you maintain the positive frame of mind that is necessary to put your best foot forward when filling out online applications or showing up for face-to-face interviews? A California Job Journal article offers six tips for maintaining a sunny disposition, including writing out a list of things that are going well in your life and staying connected to the people who love you despite employment status or the state of your bank account. Read on at: http://www.jobjournal.com/article_full_text.asp?artid=2152

Tech Talk: Open Source Software's Legal Muscle Scores a Victory

Score one for complimentary software. As Monsoon Multimedia learned the hard way, just because software has no charge doesn't mean that it has no restrictions. The pro-bono legal team at the Software Freedom Law Center announced that they'd reached a settlement in the first ever lawsuit filed over the General Public License. Read more and comment at: http://blogs.spectrum.ieee.org/tech_talk/2007/10/open_source_softwares_legal_mu.html

The Sandbox: More PS3 Conflict

An old coworker (or, the shibboleth of an old newsgroup of mine, coworker), Jason Booth, has blogged about his low opinion of the PS3, and was inundated with a lot of Sony defenders saying all kinds of, well, web-forumish things. Trouble is, he's right, guys. Face up to it. Read more and comment at:

http://blogs.spectrum.ieee.org/gizmos/2007/10/more_ps3_conflict.htm

Automaton: World Robot Population Is 4.5 Million and Counting

Ever wonder how big the world's robot population is? Well, exactly how many robots are around is hard to know, but here's an educated guess: 4.5 million. If all those bots were to congregate and form a nation, its population would be larger than Costa Rica's but smaller than Croatia's, whatever that means. Read more and comment at:

http://blogs.spectrum.ieee.org/automaton/2007/10/30/world_robot_population.html

The Risk Factor: What Does Microsoft Do with all that Error Data?

On a "good" day, some 50 gigabytes of error data flows into Microsoft, according to the Wall Street Journal. Two dozen programmers pour over the data, looking for OS kernel and or application problems resulting from design flaws, programming, errors, resource conflicts, and other sorts of programmer and designer ingenuity. Does anyone out there know what lessons have been learned? Read more and comment at:

http://blogs.spectrum.ieee.org/riskfactor/2007/10/what_does_microsoft_do_with_al.html

The Changing IT Job Market

Good news for job seekers thinking of becoming an IT professional: job cuts in the tech sector are down 24 percent compared with the same time period in 2006, and pay for non-certified IT workers now averages more than pay for workers with IT certifications. Non-certified IT workers are seeing a boost in starting salaries because of heightened demand for people with experience using enterprise business applications or application development tools, or have a background in Web/e-commerce development. For more on the IT job outlook, see:

http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=careers&articleId=9043021&taxonomyId=10&intsrc=kc_top

2008 Public-Awareness Program Launched to Bolster Image of Engineers, Engineering

WASHINGTON (22 January 2008) -- As part of its long-term, ongoing effort to improve the public's understanding and appreciation of engineering, IEEE-USA has launched its 2008 public-awareness program that reaches out to youngsters, adults and the public-at-large through a variety of media targeted to specific audiences. The IEEE-USA Board has approved \$72,000 in support of special public-awareness projects, plus \$40,000 in related public-relations expenses for a total of \$112,000 dedicated to bolstering the image of engineers

and engineering in 2008. The public-awareness program includes six components:

Adding IEEE technologies to TV engineering news spots developed through the American Institute of Physics (AIP) "Discoveries & Breakthroughs" syndication service of 12 monthly reports in English and Spanish distributed to more than 100 U.S. TV stations (for details, see

<http://www.aip.org/dbis/IEEE/>

Helping print and broadcast journalists communicate authoritatively to the public about engineering and science through the placement of two IEEE-USA Engineering Mass Media Fellows in media outlets as part of the AAAS program (for details, see

<http://www.ieeeusa.org/communications/massmedia.asp>

Recognizing journalists for furthering the public's understanding of the engineering profession with two \$1,500 honorariums (for details, see

<http://www.ieeeusa.org/volunteers/awards/award8.html>

Demonstrating engineering support for community activities and reaching Washington opinion leaders through promotional announcements on the U.S. capital's only classical music station, WETA-FM at

<http://www.weta.org/>

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Trade secrets.

Just one of the Intellectual Property issues Phillips Lytle can help you with. Our attorneys have the diverse technical and engineering backgrounds to provide unique insight into all areas of the law, including trade secrets, patents, trademarks, copyrights, and IP litigation. To get in touch with our IP group, just call Mike Berchou at (716) 847-7078.

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Launching an online engineering video competition for undergraduates on "How Engineers

Make a World of Difference" with \$10,000 available in scholarship awards to be announced during Engineers Week from 17-23 February (for details, go to http://www.ieeeusa.org/communications/video_competition/)

mail at: Dr. J.L. Zirnheld, 312 Bonner Hall, Buffalo, NY 14260

Introducing youngsters to basic engineering concepts and communicating engineers' support for local community activities through the National Engineers Week 2008 Discover Engineering Family Day to be held at the National Building Museum in Washington, D.C. on 16 February (for details, see <http://eweekdcfamilyday.org/>)

Improving the public's understanding and appreciation of engineering continues to be a top priority for U.S. IEEE members. IEEE-USA has been actively involved in promoting public awareness of engineers and engineering for more than 25 years. For more information on IEEE-USA's public-awareness program, a brochure can be viewed and downloaded at <http://www.ieeeusa.org/communications/files/PABrochure.pdf>.

IEEE Newsletter to go Electronic

Due to the technological age that we live in the IEEE newsletter has a possibility of being distributed online through e-mail accounts. Currently, the board has voted to send the newsletter out exclusively via electronic means. If you have any questions or concerns you may contact us by email: sec.buffalo@ieee.org

What does IEEE membership mean to you?

What about being an IEEE member is important to you? How does being an IEEE member benefit you or how does IEEE benefit from you being a member? If you have any comments, please contact us by email: sec.buffalo@ieee.org

Job Hunting?

The IEEE Job Site, available exclusively to IEEE members, can help you locate career opportunities easily and confidentially. Just complete a profile of your qualifications and requirements, and you'll be notified via email when a suitable job becomes available. IEEE Job Site was named one of the top online recruitment sites by Weddle's Guide to Employment Web Sites. And top employers know that IEEE members are the most qualified electro technology and information-technology professionals in the world. Take a few minutes to register with the IEEE Job Site and check out your career options today! <http://www.ieee.org/jobs>

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MEMBER LETTER
TO ESTABLISH A BUFFALO CHAPTER OF
THE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBS)

I, _____, am a current member of the Engineering in Medicine and Biology Society and request that a Buffalo Section of the Engineering in Medicine and Biology Society be established for the benefit of furthering the professional, scientific and business related developments of this society.

This chapter will support the mission of The Engineering in Medicine and Biology Society of the IEEE, which is stated below:

“The Engineering in Medicine and Biology Society of the IEEE advances the application of the sciences and technology to medicine and biology, promotes the profession, and provides leadership for the benefit of its members and humanity by disseminating knowledge, standards, fostering professional development, and recognizing excellence”.

The field of interest of the IEEE Engineering in Medicine and Biology Society is the application of concepts and methods of the physical and engineering sciences in biology and medicine in very broad spectrum ranging from formalized mathematical theory through experimental technological development to practical clinical application. It includes support of scientific, technological and educational activities”.

Please Complete the Following Information:

Name: _____ IEEE Member Number: _____

Date: _____ Contact Phone Number: _____

Employer: _____ Title: _____