The October 2007 IEEE New Hampshire Section Newsletter

http://ewh.ieee.org/r1/new_hampshire/newsletters.html

Chairman's Thoughts

By Tom Perkins

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There really seems to be two times of renewal in IEEE. One is the beginning of the academic year in September, and secondly, the start of the calendar year which dictates fiscal duties as well as changes in leadership. As I go into my final three months as Section Chair, I do not feel like a “lame duck”, but more like I’m sprinting for the finish line. I have confidence that the team that carries on next year will accomplish more. Focus should always be on our members and growing our great engineering profession primarily by providing exciting educational opportunities at all possible levels. I hope to assist (but not interfere) next year as Past Chair.

The week of September 17 was quite busy for our Section. I counted 5 separate events. I only regret that I couldn’t attend them all. WIE, MTTS, PES, and CS all had meetings as well as a planning meeting involving pre-university education. We still need to get some activities going with EMBS and PELS. I’m gratified that we may soon have a joint Communications / Signal Processing chapter.

As our outreach grows, we need more volunteers. If you are interested, please contact me or other section executive committee members. (See the separate article on Volunteerism.) I urge you to make a special effort to attend the NH Joint Engineering Conference on October 11, and join Col. Shoop, our Region 1 Director, at the annual banquet on November 1.

If you have any topics that you think should be discussed at next month's Ex Com meeting, normally held on the second Thursday of the month, or if you want to discuss any other topic, please feel free to contact me, I would enjoy hearing from you.

From the Editor

By Jim Anderson

james-w-anderson@ieee.org

Computing History Competition

The IEEE Computer Society runs an annual competition for student teams world wide to develop a web site that presents some element of the History of Computing. The winning team for 2007 is from Japan and their website is called "The Unknown History and Technology of MARS". The website is at: http://w3.doshisha.ac.jp/chc61/

Besides documenting the evolution of the systems involved with ground transit in Japan; the site is a delight to explore, reflecting creative and relevant ways to make information available.

Patent Law Change

I received the following message from IEEE-USA:

The U.S. House of Representatives passed a flawed Bill last Friday that would radically change the Patent system in this country. The Patent Reform Act of 2007 contains several controversial provisions, including changing the U.S. Patent system from a "first-to-invent" standard to a "first-to-file" standard. This means that Patents would be awarded to the first person to file for a patent, not the first person to make the underlying invention.

Any IEEE member who is involved in creating or protecting intellectual property should be aware of this bill.

IEEE-USA has posted a Legislative Action Alert on Legislative Action Center here: www.ieeeusa.org/policy/lac. We encourage all

concerned IEEE members to visit to learn more about the bill and to contact their elected officials regarding it.

A letter expressing IEEE-USA's concerns can be found here: http://www.ieeeusa.org/policy/policy/2007/082707.pdf

Thank you for your help. This bill is expected to move very quickly in the Senate, so members who wish to express their opinions to Congress need to do so right away.

Russell T. Harrison
Senior Legislative Representative
Grassroots Affairs IEEE-USA
(202) 530-8326

IEEE 2006 Annual Report

If you would like to download a copy as a PDF document go to: http://www.qmags.com/d.asp?pub=IEEEAR&upid=AReport06&fl=others/IEEEAR/IEEE_AnnualReport06.pdf or If you would like to view it in your browser go to: http://www.qmags.com/OLHit.asp?pub=IEEEAR&upid=AReport06&url=http://online.qmags.com/IEEEAR06S.

CORRECTION

Last month I misspelled Liberty Gunter's last name a couple of times. My apologies for any inconvenience this may have caused.

Please contact me if you have any comments about, or suggestions for, the newsletter.

In This Issue

Chairman's Thoughts

Tom Perkins tells us about new beginnings, about the five meetings that we had the week of 9/17, and the need for more volunteers to sustain our growth. He also asks us to attend the Oct. 11 NH Joint Engineering Societies Conference and the Nov. 1 Awards Banquet.

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From the Editor

Jim Anderson reports on the Computing History Competition, recent negative changes in patent law, the availability of the 2006 IEEE Annual Report and a error in last month's newsletter.

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Section Member Honored

New Senior Member!

We have been notified that Dong Xu has recently been elevated to Senior Member status. Congratulations Dong!

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Volunteerism

Jim Anderson reports that volunteers live longer, have greater functional ability, and suffer less from depression than non-volunteers and he summarizes a report on volunteers in the US.

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Fifth Annual Awards Banquet

Dr. Barry Shoop will be the keynote speaker. The banquet will be held at The Yard in Manchester on November 1 at 6:00 PM. Reservation deadline is October 22. For more banquet information please see the September newsletter or go to: http://ewh.ieee.org/r1/new_hampshire/Docs/Banquet07.pdf

Chapter and Group News

Joint Communications and Signal Processing Societies Chapter

Ravi Subrahmanyan & Kenric Nelson update us on the plans for joint chapter and invite members of these societies to a planning meeting on October 18, 2007.

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Computer Society

Dr. Barbara Bancroft reports on the September 18 IT Seminar.

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Jim Isaak announces two meetings. **Please support us by posting these meeting notices at work or school.**

"A Survey of Contemporary RFID Solutions and Applications", by Bill Freeman of Visible Assets, on Tuesday October 23, from 7 – 8 PM at SNHU, Manchester.

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"Software Engineering Standards and Gaming Development", by Susan "Kathy" Land of MITRE on Tuesday December 4, from 7 – 8 PM at SNHU, Manchester. (Page 18)

Microwave Theory and Techniques Society

Tom Perkins reports on the Tuesday September 18 meeting and announces two more meetings. (Page 7)

Please support us by posting these meeting notices at work or school.

A joint meeting of MTT-S with the Engineering in Medicine and Biology Chapter. "Through-the-Wall Personnel-Detection Technology" by Dr. Victor Lubecke, University of Hawaii, Monday, October 29, 2007 at 6:00 PM, at BAE SYSTEMS Headquarters Building Auditorium, 65 Spit Brook Road, Nashua, NH. (Page 20)

"Signal Integrity for 5 to 10 Gbps Board Designs" by Jason Boh of Agilent, on Thursday, November 15, 2007 at 6:00 PM, at BAE SYSTEMS Headquarters Building Auditorium, 65 Spit Brook Road, Nashua, NH.

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Power Engineering Society

Jim Anderson gives a brief report on the September 20 meeting and tour of the FCI Burndy Electrical Test Lab.

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Women In Engineering

Jennifer Ng Ain Kin reports on the upcoming events,new WIE logo, mentoring, the WIE / SWE financial seminar and the Diversity Leaders Power Conference.

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Other Chapter Contact Information

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Pre-University Educational Activity News

Planning Meeting Report

Don Sherwood reports on the TISP and ThinkFest 2008 plans for the current school year.

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Student Activities

NHCTC Nashua Student Branch

Dr. Barbara Bancroft reports on the progress in forming the student branch, their officers and activities.

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UNH Durham Student Branch

Garrett Partridge reports on recent activities: Recruiting new members, branch meeting, tutoring, and a new soda machine.

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Other Articles

Joint Engineering Societies

NOTE: the registration deadline has just been extended until Noon on October 5th. The all day conference is on Thursday, October 11, 2007 at the Executive Court Banquet Facility of The Yard Seafood and Steak House in Manchester. For more information see the August newsletter or go to: http://www.ewh.ieee.org/r1/new_hampshire/Docs/NHJES%20Conf.pdf

$1,500 Essay Contest

Stanley B. Supinski, PhD announces the First Annual Homeland Security Essay Contest. This is your chance to prove that engineers can write, earn a cash prize, and an all expense paid trip to CA. The top four finalists will have their papers published.

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National Security Forum

The World Affairs Council of NH cordially invites you to a NATIONAL SECURITY FORUM. A Discussion with Senators Gary Hart and Warren Rudman moderated by Joseph W. McQuaid, publisher of the NH Union Leader. Thursday, October 18, 2007, at 5:30 at Walker Auditorium, Frost Hall, Southern New Hampshire University. Registration deadline October 8, 2007.

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Membership Activities

Stuart MacPherson updates us on the Senior Member Campaign.

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2007 Young Engineer Award

Dean Bacon, Awards Committee Chairman, reminds us about the call for nominations for the 2007 Outstanding Young Engineer Award for engineers 35 or younger as of January 1, 2007. Nomination deadline is October 10, 2007.

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Brain Teaser Challenge

Butch Shadwell provides us with the answer to last month's geometry challenge. This month he challenges us with a polarized light problem.

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Other Meetings of Interest

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WANTED

We need a Section Photographer, and “How I Became an Engineer” articles.

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Questions and Answers

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Section Member Honored

New Senior Member!

By Stuart H. MacPherson
stuart.macpherson@ieee.org

Dr. Dong Xu received a B.E. degree in the Department of Materials Sciences, Tsinghua University, Beijing, in 1989. He was awarded a master degree in Semiconductor Device Physics from the Shanghai Institute of Metallurgy, the Chinese Academy of Sciences, Shanghai, in 1992. Through the fellowship program sponsored by the Volkswagen Foundation, Hannover, Germany, he went to Walter-Schottky-Institut, Technical University of Munch, and obtained his Ph.D degree from the Physics Department, Technical University of Munich, Garching, Germany in 1997. From Feb. 1997 to Nov. 1998, he was a research fellow engineer in System Electronics laboratories, Nippon Telegraphy and Telephone Corporation, Atsugi, Japan, engaging in the research and development of ultra-high-speed high electron-mobility transistor (HEMT) based on III-V compound semiconductors grown on InP substrates. In particular, he developed the device technology for achieving very high aspect ratio for ultra-short gate-length HEMTs, realizing world's first and fastest 30-nm enhanced-mode HEMT on InP substrates.

Dr. Xu joined Microelectronics Technology & Products of BAE Systems in 2001, where he is currently a senior principal engineer in Advanced Process Group. At BAE, he worked on multiple microwave and millimeter wave HEMT MMIC device and process technologies based on GaAs, InP and GaN. In particular, he developed devices and MMIC's based on Low-Temperature-Grown GaAs gate layers, tri-layer electron-beam lithography process for high-yield fabrication of T-gates with ultra-short gate lengths for HEMT products, and novel technology for ultra-high-gain metamorphic HEMT for operation in 300-340GHz or beyond. Dr. Xu has authored or co-authored more than 60 publications in international technical journals and conference proceedings.

Dong and his wife Zhaojing live in Nashua. Their 11-year-old son Tong wants to be an engineer in the future, while their first grader daughter Annie has a dream to be a "chocolate maker".

Volunteerism

By Jim Anderson
james-w-anderson@ieee.org

I recently ran across a report on volunteerism. At the end of the report they said that various studies over the last 20 years showed that volunteers live longer, have greater functional ability, and suffer less from depression than non-volunteers.

BOTTOM LINE: Volunteer to help the section and you will live a longer and happier life! What more could you ask for?

The report "Volunteering in America, 2007 City Trends Ranking" was issued by the Corporation for National and Community Service. The report is based on 2004 through 2006 government data on the 50 largest metropolitan areas in the US and analyzed the time volunteered at non-profit organizations.

Area	% People Volunteering	Hrs / Year Volunteered
Urban	23.7	51
Suburban	29.3	50
Sex		
Male	24.3	52
Female	31.6	50
Age		
16 - 24	23.4	39
25 - 34	24.7	37
35 - 44	33.3	48
45 - 54	32.2	52
55 - 64	29.3	60
65 - 74	27.5	96
75+	20.9	100

The report lists the details for all 50 areas. The table below lists the highlights for the five New England areas included in the report:

City	% People Volunteering	Hrs / Year Volunteered
New Haven CT	30.2	45.7
Bridgeport CT	32.3	42.2
Hartford CT	29.6	34.7
Boston MA	27.5	28.1
Providence RI	23.3	24.3

The report also categorized where the people volunteered. Here are the national averages:

Activity	% People Volunteering
Religious	35.3
Education & Youth	27.0
Social & Community Service	13.1
Hospitals & Health Related	7.9
Civic, Political & **Professional**	6.6
Other	6.6
Hobbies, Sports, Art & Culture	3.6

If we assume that we can divide the people in the "Civic, Political & Professional" category into three equal parts then 2.2% of the roughly 26.5% of the people who volunteer nationally volunteer for professional organizations. That means that 2.2% of 26.5% or 0.58% of the members of professional organizations are active volunteers. This is way below the 10% figure that I have heard for years is necessary to run a successful volunteer organization.

They also reported the following demographic trends: Volunteerism increases with level of education, home ownership, the per capita number of small non-profit organizations in the area; and decreases with commuting time to work.

There are no big surprises in the report but it is obvious that we need more volunteers to allow the section to grow and offer more services to you our members.

As was stated above; **BOTTOM LINE: Volunteer to help the section and you will live a longer and happier life! What more could you ask for?**

The report can be obtained at:

http://www.nationalservice.gov/about/volunteering/cities.asp

Chapter and Group News

Joint Communications and Signal Processing Societies Chapter

By Ravi Subrahmanyan & Kenric Nelson
Ravi_subrahmanyan@yahoo.com &
Kenric.Nelson@ieee.org

Plans for a joint chapter of the Communications and Signal Processing Societies are progressing. Dr. Gabriel Jakobson has agreed speak at a kickoff meeting, currently planned for early 2008. Dr. Jakobson is the Chief Scientist of Altusys Corpotation and is an IEEE Communications Society Distinguished Lecturer. He will speak about Cognitive Operational Situational Management.

A dinner planning meeting will be held on Thursday October 18th @ 6:30 PM at the Giant of Siam restaurant at 5 E Hollis Street in downtown Nashua. Please plan to attend if you'd like to assist in initiating the chapter. At least 12 people from the Communications and Signal Processing societies are needed to sign the petition to start the chapter. We are also seeking ideas for speakers or activities and a place to host the chapter meetings.

Computer Society

Report on September18 IT Seminar

By Dr. Barbara Bancroft
bbancroft@ccsnh.edu

Mike Furgal, a senior product manager from Progress Software, gave a talk on "Interconti-nental Data base Development" at NHCTC. He gave a tutorial about how data bases work followed by a discussion of issues associated with a multi-continental company. Mike manages group that has members in Nashua, Bedford and India. His first hand perspective of "Follow the sun" development strategies generated an interesting discussion. The seminar was very well attended. The topic of Data Bases was particularly well suited for students enrolled in the Data Base Design class. Our business students were interested in the aspects of international highly technical company operations.

Speaker Mike Furgal

Audience Eating Lunch and Listening to Mike

A copy of Mike's PowerPoint presentation can be found at:
http://ewh.ieee.org/r1/new_hampshire/Docs/Furgal.ppt

Microwave Theory and Techniques Society

By Tom Perkins
tomperkins@ieee.org

On Tuesday, September 18, Dr. Richard Snyder, a Distinguished Microwave Lecturer for MTT-S, presented an excellent talk on the *Practical Aspects of Microwave Filter Development*. Seventeen people were in attendance. Dick has been in the microwave field for well over 40 years and has a lot of good wisdom and experience in a specialty which many engineers chose to avoid. Following the meeting, four attendees joined him for dinner at the Longhorn restaurant. The laugh of the evening was that he and I each thought to wear a Liberty Bell tie which was presented to us at the 2003 IEEE International Microwave Symposium in Philadelphia, which he chaired. I have one of these ties, but Dr. Snyder has many, as he got the left-overs.

To give you an idea of how the presentation was received, I received the following thank you note the next day from one of the attendees:

Hi Tom,
Just a note to tell you again that I really enjoyed Dr. Snyder's talk last night on microwave filters. It was one of most interesting technical lectures that I've attended. The dinner get-together afterwards was nice as well. I look forward to attending other MT&T NH-chapter lectures in the coming months.

Regards,
Marc Ditz
Sr. RF Design Engineer
DTC Communications, Inc.

The following morning, Dick came back for a breakfast meeting at BAE Systems with our microwave engineering staff and presented information on his company, RS Microwave. The next evening he gave the same talk to the Connecticut MTT-S chapter. A copy of his presentation will be made available soon to those requesting it.

While we're on the subject, IMS 2008 will be in Atlanta next June. IMS 2009 will be in Boston. If you are interested in helping, I'm on Fred Schindler's committee. Contact me if you are interested, we're still looking for more volunteers. It's a lot of fun. Please take note of our next meeting on November 15.

Power Engineering Society

By Jim Anderson
james-w-anderson@ieee.org

On Thursday September 20 we had a very successful meeting at FCI-Burndy in Manchester, NH. Mr. Ron Lai (Pictured at the left), who is a member of the section, was our host. He is the Senior Director Global Standards, Electrical Division, FCI-Burndy and has been with the company for over 40 years. Ron gave a very informative presentation on Codes, Standards and the Electrical Industry.

While Ron's picture does not show it, he was wearing his IEEE polo shirt for the presentation, and Lee Herron, Vice President, Business Development ordered a shirt.

Ron reviewed the history of the electrical codes from the late 1800's until the present and the advances in connectors during that time. He also talked about the differences between the National Electrical Code which covers commercial, manufacturing and residential applications and the National Electrical Code which covers the electrical utilities.

After the presentation Ron and Lee Herron gave us a tour of their engineering test laboratory which is a Nationally Recognized Test Laboratory. During the tour we witnessed a number of

ongoing tests:

- Current Cycling
- Short Circuit Testing
- Tensile Testing

The last two were the most interesting as engineers always like to watch things tested to failure.

FCI-Burndy not only tests their connectors but they also life test all their crimping tools.

A copy of Ron's presentation can be found at: http://ewh.ieee.org/r1/new_hampshire/Docs/Burndy.pdf

If you were not able to make the meeting, you missed a good one. We hope that you will be able to make the next meeting.

If you have any suggestions for meeting topics or speakers; or if you would like to become active in the Chapter please contact Paul Krell at: krell@unitil.com

Women In Engineering

By Jennifer Ng Ain Kin
jng@ieee.org

WIE NH Activities

IEEE Women In Engineering (WIE) is dedicated to important issues for Women Engineers. Affinity groups provide the opportunity for members to network at a local level. All members (male and female) are encouraged to join and participate in their local group activities to promote growth within the WIE.

Upcoming Events:

- October 8: Call for Nominations for IEEE NH WIE Officers 2008. If you are interested to run for an executive position, please email nhwie-excom@ieee.org with a short biography.

- October 16 [link]
Diversity Leaders Power Conference - Boston, MA *sponsored by DLPC*

- November 2 [link]
2007 FIRST Women in Science & Technology (WIST) Forum *sponsored by FIRST (For Inspiration and Recognition of Science and Technology)*

For the complete list of events (and details on each event above), go to the WIE NH website at http://www.ieee.org/go/nhwie - select Events then the specific [link] to the event.

WIE annual membership is very affordable – only $25/year, **FREE** for Life Members and Student Members!!! So join **TODAY**!

New WIE Logo!!

IEEE Women In Engineering has a new logo. One of the versions is illustrated above and was provided as a sneak preview by Dr. Karen Panetta (WIE Committee Chair) - for type font aficionados like me, the font is called Adobe Jenson Pro. The rest of the set will eventually be available on the main WIE page (http://www.ieee.org/women) Thanks Karen!

Contacts:
Chair 2007: Jennifer Ng jng@ieee.org
Vice-Chair 2007: Liberty Gunter Liberty.Gunter@baesystems.com
Secretary 2007: Fan Gu gu.fan@ieee.org
Or all three of us nhwie-excom@ieee.org

IEEE Mentoring Connection – Find a mentor / Become a mentor!

Have you considered becoming a mentor? What about finding a mentor?

Cathy Downer, Regional Activities Project Manager, in the June 2007 Institute Online [link] tells us how the IEEE Mentoring Connection can be a place for IEEE members (higher-grade) to go find answers. For instance, how to deal with the transition of individual contribution to management or team leadership? How do deal with culture differences when working with geographically distributed sites? How to sharpen skills for the next career move? How to deal with work/life balance? How to deal with constant changes in the

workplace?

IEEE Mentoring Connection online program site (http://www.mentoringconnection.com/) recently added an on line discussion forum where mentors and mentees can post questions/ideas/comments and get feedback. This feature is a great plus the program since it allows mentees, who have not yet been matched, to get opinions on a specific issue or question. Hence the term of "situational mentors" where all registered mentors can contribute at the same time and open the discussion on the topic.

The IEEE Mentoring Connection currently has 948 Mentees and 418 Mentors in the program. There are 208 matches with 184 open requests waiting for a match. There are 64 countries represented by those participating in the mentoring program. IEEE counts around 150 countries represented by general membership in the annual statistics.

For more information, contact Cathy Downer at c.downer@ieee.org or go to http://www.ieee.org/web/membership/mentoring/index.html

Mentoring, in the first person:

I have been a mentor with IEEE Mentoring Connection for several years now and it is a very rewarding experience to have IEEE peers as mentees and mentors – Yes, even a mentor needs a mentor, for one can never learn or experience everything in one lifetime. I have also been a mentor since 2002 for my Alma Mater, McGill University in Montréal, Canada. At McGill, my mentees are current EE students at the university and the situations usually involve whether to pursue graduate studies or not, how to diversify their studies – especially their final course projects - to ensure that they get better chance at a job upon graduation or what to do for extra-curricular activities (I shamelessly always mention volunteering at the local IEEE Student chapter) to catch the attention of potential recruiters. Both programs (IEEE and McGill) taught me a lot about myself and also given me opportunities to help others.

Michael J. Riezenman interviewed me for the Institute Online (August 2007): http://www.theinstitute.ieee.org/portal/site/tionline/menuitem.130a3558587d56e8fb2275875bac26c8/index.jsp?&pName=institute_level1_article&TheCat=1002&article=tionline/legacy/inst2007/aug07/careermentors.xml&

WIE/SWE Financial Seminar: *Strong Women, Powerful Financial Strategies*

Paul Pouliot, Ameriprise Financial Advisors

Why should women have different financial strategies?

Paul A. Pouliot, CFP(r) - Senior Financial Advisor at Ameriprise Financial Services, Inc. - tells us that there are various factors: women generally live about 7 years more than men; they still earn less than their male counterparts in the corporate world and also typically take a few years off or work part-time in order to raise their children or take care of other family members (e.g. aging or ailing parents).

The seminar, held at the Robert Frost Hall (Southern New Hampshire University) in Manchester on September 19, 2007, addresses some of the strategies to start thinking and acting in order to realize the financial goals for the future. Paul also featured case studies of different women in various stages of life and described their specific needs and how financial advice can play an important role.

Benefits of professional financial advice: as Paul says "Successful people not only dream, they take action and hold themselves accountable to their dreams". As advisors, Paul and his team provide the systems to help people stay focused and help them measure their successes each year. They also help their clients prepare for and guard against the unexpected things in life that can keep them from achieving their goals such as inflation, market volatility, a sudden loss or decline in income due to a layoff, disability or a family tragedy that requires attention.

At the seminar, each attendee received a comprehensive workbook – with a glossary of investing terms and important questions to ponder on – as well as an Ameriprise "Dream Book" to help getting started. After all, as Paul mentioned at the end of the seminar: "Dreams don't retire."

If you are interested for more information (and

for a free one-hour consultation), please contact him below:

Paul A. Pouliot & Associates
A financial advisory practice of
Ameriprise Financial Services, Inc.
116 South River Road, Coldstream Park, Building E | Bedford, NH 03110
Office: 603.296.0030 | Fax: 603.296.0028

Paul.A.Pouliot@ampf.com
http://www.ameripriseadvisors.com/paul.a.pouliot

If you are interested in additional topical seminars in other areas of financial planning such as College Planning, Income in Retirement, Estate and Legacy Planning, Investments, Insurance and Tax Reduction Strategies, please let me know.
Contact: Jennifer Ng, WIE NH Chair 2007
jng@ieee.org

IEEE and WIE featured at the Boston Diversity Leaders Power Conference

http://www.diversitypower.com/index.php?page=program_sponsor

Diversity Leaders Power Conferences, held throughout the country during the fall and early spring of each year, provide college undergraduates, graduate school students & working professionals with an opportunity to meet and establish relationships with recruiters from some of America's leading employers, spanning multiple industries. Focusing on the themes of "leadership" "career enrichment" and diversity in the workplace, each 3-hour DLPC event features an opening network reception, dinner, featured speaker, panel discussion and closing reception. All costs while at the conference are underwritten by the Hosting Employers.

There are two simultaneous DLPC events at each Power Conference: a Collegiate DLPC for college undergrads and a Graduate DLPC for students or holders of graduate degrees (MA/MS/MBA/PhD) and working professionals with at least a BA/BS degree and 3-years of professional work experience. Pre-registration is required (www.diversitypower.com) and if invited, the dress is business attire. Each DLPC event is limited to no more than 100 candidates and 10 employers with candidates seated at dinner where there is the best match for their skills, educations, experience and desired industry.

Unlike a job fair, where standing in line with hundreds of other candidates and exchanging information with a recruiter in less than 60-second "conversations", a Power Conference is designed to provide ample time for a meaningful dialogue between students, graduates, working professionals, fellow candidates, prominent alumni and of course, the hosting employers. Because students & working processionals must register and provide information about themselves pre-event, time spent between employers and candidates is more productive, there are no lines and since you presumably uploaded your resume during registration, resumes at the event are not necessary.

Jennifer Ng jng@ieee.org , NH Section Vice-Chair 2007 and NH WIE Chair 2007, has been invited to participate in the Boston venue on October 16th 2007. Details are as follows:

Radisson Hotel Boston
200 Stuart Street 02116
617-482-1800
Collegiate Conference: 4:00PM to 7:00PM
Graduate/Professional Conference: 5:00PM - 8:00PM

If you are interested to participate, please register via the DLPC website at http://www.diversitypower.com/index.php?page=register

Other Chapter Contact Information

Engineering in Medicine and Biology Society

By Wayne Smith

If you have any suggestions for meeting topics or speakers; or if you would like to become active in the Chapter please contact me at: wjsmith@-cisunix.unh.edu

Power Electronics Society

By Chuck Button

If you have any suggestions for meeting topics or speakers; or if you would like to become active in the Chapter please contact me at: chuckbutton@ieee.org

Pre-University Educational Activities News

Planning Meeting Report

By Don Sherwood

donsherwood@ieee.org

The first planning meeting for pre-university activities for this school year was held on September 20th. Jim Anderson, Erich Whitney, and I met at Penera Bread in Nashua to discuss two topics for the upcoming school year.

The first item was the Teacher In Service Program, TISP. A modest goal of conducting at least one teacher workshop during this school year was set. The objective of the workshop is to introduce elementary and high school teachers to activities that promote technological awareness in the classroom. Forty two activities are available on the Try Engineering web site, http://www.tryengineering.org/lesson.php . Erick will look into identifying recent changes to the New Hampshire state standards and how best to incorporate these into the program.

The second item was the ThinkFest 2008 program which will be held in March at Merrimack College in Andover MA. This is a full day, high energy, carnival fair type event where elementary students are rotated through a number of high tech activities to score points and win prizes. Another activity is a catapult contest for high school students which carries a four year $20,000 mechanical engineering scholarship to Merrimack College. In the past, the activities involved mostly mechanical and civil engineering disciplines. We agreed to support ThinkFest 2008 with an electrical engineering activity. The main objectives of this activity are; it must be interesting to students, students must be able to complete it in a short period of time, and the results must be measurable to establish a score. If you have any ideas, please send them to me.

Student Activities

NHCTC Nashua Student Branch

By Dr. Barbara Bancroft

bbancroft@ccsnh.edu

Last spring students from the New Hampshire Community Technical College, Nashua formed a club initially called the Computer and Engineering Technologies Club, with the purpose of exploring the possibility of becoming an IEEE Student Branch. These students are interested in promoting their professional growth. The response to the club was overwhelming. Thirty nine students joined IEEE and 29 signed a petition to become an IEEE Student Branch. The petition has been submitted to IEEE and we are waiting for formal approval. As the students found out signing the petition was the easy part. The petition had to be backed up by our State Licensing documents, our New England Association of Schools and Colleges – Commission on Higher Education accreditation, and our TAC/ABET accreditation. We are all thankful to Duncan Morril for his support and leadership during this process.

Shown in the picture above are club advisors Professor David Miller, and Dr. Barbara Bancroft; Brianna Farrel, chairwoman; Jason Pelletier, vice – chairman; Richard McGonagle, treasurer; and Michael Miele secretary.

Department chair, Professor Ken Coletta supports activities of the club and the club petition to become an IEEE Student Branch.

The members of the club are already tirelessly recruiting new students and introducing them to the benefits of IEEE. So far this semester we had 15 new students express interest and 10 joined IEEE.

As our major activity the club is helping to organize the joint Southern New Hampshire University and New Hampshire Community Technical College Information Technology Seminar Series. First seminar took place over lunch on Tuesday September 18th at NHCTC.

UNH Durham Student Branch

By Garrett Partridge

srvlegend@gmail.com

The current semester has started off with notable success. Prior to the start of classes, a couple of the IEEE officers attended the UNH Wildcat Days to present the incoming departmental students with some information about the IEEE as well as some general advice on succeeding in the field. We also participated in the UNH Student Activities Fair to promote the club to larger base of students. The necessary paperwork to maintain University Student Organization status was completed recently. This will provide funds and resources for any club activities we host throughout the year.

The first chapter meeting marked the largest attendance in years. There were approximately 35 attendees as well as some faculty members. We are organizing a fall barbecue for the department to welcome the incoming freshman.

IEEE sponsored tutoring was successfully started last Thursday and will continue every Thursday for undergraduate students.

Recently a soda machine was purchased for our lounge with fund raising money that will provide ongoing revenue long after the current officers has graduated.

Students Hard at Work

Mission Accomplished

Other Articles

$1,500 Essay Contest

By: Stanley B. Supinski, PhD

Sjsupin@adelphia.net

The Center for Homeland Defense and Security is pleased to announce: The First Annual Homeland Security Essay Contest.

What single aspect of Homeland Security has been most successful and what single aspect will be most critical to Homeland Security success? This is the question many will attempt to answer in the first annual homeland security essay contest sponsored by the NPS Center for Homeland Defense and Security. The competition strives to stimulate original thought on issues in Homeland Security and Homeland Defense.

Your response may be general, or focus on a specific aspect (organizational, policy, strategy, practice, technological innovation, social impact, etc.) or discipline/field (such as emergency management, public health, law enforcement, critical infrastructure, or intelligence). Essays should be no more than five pages, single-spaced and twelve-point type and in Word or PDF format. Entries must be submitted via the www.chds.us website.

Deadline for submission: 02 January 2008.

CHDS reserves the right to publish all contest entries. Essays will be evaluated based on the relevance and innovation of their ideas, the strength

of argument and the sophistication of presentation.

Who may enter: The competition is open to anyone who is interested in the field of homeland security. Individuals associated with CHDS are not eligible.

Award: The winner will receive a $1500.00 cash award and an all-expense-paid trip to the Naval Postgraduate School Center for Homeland Defense and Security in Monterey, California where they will be recognized. The winner and the four top finalists will have their essays published in a special edition of Homeland Security Affairs, the official publication of the NPS Center for Homeland Defense and Security.

How to enter: Simply fill out the entry form https://www.chds.us/?contests/essay_entry where you can
upload your submission.

Stanley B. Supinski, PhD
Director, Partnership Programs
Naval Postgraduate School,
Center for Homeland Defense and Security
(719) 481-0266
(719) 482-5452 (cell)

Membership Activities
Senior Member Campaign

By Stuart H. MacPherson
stuart.macpherson@ieee.org

Your Section has three members for application review for senior membership this month. The IEEE review board did not meet at the end of August and therefore no new Senior Members to report. Last month, I reported the names of all those who have been elevated this year. With regret, Scott Valcourt's name was omitted.

Remember, qualifications are straightforward: "… a candidate shall be an engineer, scientist, educator, technical executive or originator in IEEE-designated fields. The candidate shall have been in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years." If you believe you have met the fundamental requirements, your professional colleagues in NH are willing to support you in seeking Senior Membership.

The NH Section Membership Development Committee has created a webpage describing the simple steps to guide you through the process: simply go to http://www.ewh.ieee.org/r1/new_hampshire/sm.html for details. Highlights are:

1. Besides the application, three references must be submitted supporting your nomination. The references must be from Senior or Fellow Members.

2. If you are being nominated by a Section, Society or Affinity Group, only two other references are required.

3. It is understood that it may be difficult for some candidates to find references. However, your local NH Section is willing to support you: provide us with a recent CV or resume and a draft application form, we can then write a nomination letter from the Section.

4. We have gathered a short list (~20) of Senior and Fellow Members who are willing to review your application and CV/resume, and based on those materials (and possibly emails and phone calls) will provide you with a reference.

If you have any questions or are considering Senior Member elevation, please contact us at nhieee-membership@ieee.org

The other members of the committee are:
Tom Perkins, Section Chair
Jennifer Ng Ain Kin, Section Vice-Chair
Duncan Morrill, Section PACE Chair
Jim Anderson, Newsletter Editor

2007 Young Engineer Award

By Dean Bacon
bacondl@NU.COM

The IEEE NH Section Outstanding Young Engineer Award was established to recognize engineers 35 years of age or under for outstanding contributions in the leadership of technical society activities, leadership in community and humanitarian activities, and evidence of technical competence through significant engi-

neering achievements.

The award, administered by the NH Section Awards Committee, is presented annually at the IEEE NH Section Annual Meeting. The recipient receives a plaque, and has the privilege of designating a college or university to receive a $500.00 scholarship to be granted to an undergraduate who is a member of the school's IEEE Student Branch.

To be eligible for the award, an individual must be 35 years of age or under on January 1 of the presentation year (January 1, 2007 for this year's award), and have been a full member of the IEEE NH Section for at least one year. Nominations can be made by any NH Section member.

Factors to be considered for selection include: local IEEE activities and leadership, professional society activities, evidence of technical competence and achievement, community and humanitarian activities, educational achievements, and professional registration.

The recipient of this award will be recognized at the IEEE NH Section Annual Banquet in November 2007.

Nominations must be emailed to NHIEEE@aol.com no later than Wednesday, October 10, 2007.

Brain Teaser Challenge

By Butch Shadwell

Last Month's Solution

I hope you had no trouble with this tenth grade geometry problem last month. "Two cars are together on an east-west highway, facing opposite directions. One has a maximum speed of 60 MPH and the other 120 MPH. They both take off in their respective directions at the same time, at max speed. After 6 minutes they both make a left turn, then 8 minutes later, they both stop. How far apart are they? Assume they both made the turn instantly without slowing down."

I know that all of you immediately realized, that I was describing a 3-4-5 right triangle. So the hypotenuse, comprising the distance between cars was obvious. Also, since the cars are always going in opposite directions, you can simply add the two car's speeds together and calculate it as one triangle. So, two miles per minute plus one mile per minute is three miles per minute. The hypotenuse of this triangle is 10 minutes, times 3 mpm, equals 30 miles. If you got it in under 30 seconds, you deserve a gold star for that day.

This Month's Challenge

Since many engineers have become stereotyped as nerds without fashion sense, I think it might be useful for me to share my extensive understanding of color and design with you that are less gifted in the area of selecting clothes and accessories. I really don't know how I came to be so good at looking good. I suppose it is something in the genes, or is it in the jeans.

No white hose after Labor Day, and this goes for the females too. Belts should match the shoes, and never mix plaids. In fact, if you are compelled to wear plaid at all, it should never be on more than one article of clothing. Natural fibers whenever possible, and try to stay with your complexion's seasonal colors, i.e. – winter, spring, fall, and summer. This does not mean that you get to wear a lot of wrinkled clothes if you are over 70.

Since we need to have a problem in this piece, what if you shine your shoes so the toe is really shiny and the top of the toe of your shoe is approximately a flat horizontal surface. Then with your shoe sitting on a table top, you hold flashlight at an angle to bounce the beam off of the shiny surface toward your eye. To attenuate this reflected light most, would you place a polarizing filter with the slits in a vertical or horizontal (parallel to the table top) orientation, between your eye and the shoe? This may seem too easy again, but my main objective in this piece is fashion awareness.

In my next installment we will address acne, and ways to keep that baby face clear.

Reply to Butch Shadwell at b.shadwell@ieee.org (email), 904-223-4510 (fax), 904-223-4465 (v), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. (http://www.shadtechserv.com) The names of correct respondents may be mentioned in the solution column.

Other Meetings of Interest

Please let me know if you are aware of other meetings that might be of interest to our members. We each belong to different societies, read different publications, work in different industries, and surf different web sites. So if you see any interesting meetings or conferences please send me the notice or the URL.

To keep the list manageable I have limited it to meetings in North America during the next six months. So far I do not have information on any meetings in February and March 2008.

Jim Anderson james-w-anderson@ieee.org

Octomber 4 - 5, 2007
NanoKAP 2007 - The 5th International Conf.
"Nanoimprint Lithography Application in Nanosystems and Nanodevices"
Miami Beach, FL
http://www.knowledgefoundation.com/

Octomber 4 - 6, 2007
COMSOL Conference 2007
Marriott in Newton, MA
www.comsol.com/conference2007

October 10 - 12, 2007
IEEE International Workshop on Horizontal Interactive Human-Computer System (Tabletop 2007), Held in conjunction with ACM UIST 2007
Newport, Rhode Island
http://www.ieeetabletop2007.org/

October 14 - 17, 2007
IEEE CONF. ON ELECTRICAL INSULATION AND DIELECTRIC PHENOMENA
VANCOUVER, BRITISH COLUMBIA, CANADA
http://www.ewh.ieee.org/soc/dei/ceidp/ceidp2007.htm

October 16, 2007
Boston Diversity Leaders Conference
Radisson Hotel Boston
www.diversitypower.com

Now through October 15, 2007
FutureBOSTON IdeaJAM Online Competition
www.zude.com/futureboston

October 16 - 18, 2007
AdvancedTCA Summit
Santa Clara Convention Center
http://www.advancedtcasummit.com/

October 22 - 23, 2007
IEEE Industrial Energy Efficiency Workshop
Sheraton Baltimore City Center, MD
http://ieew2007.googlepages.com/

October 22 - 24, 2007
The Electrical Insulation Conf. (EIC)
Opryland Hotel, in Nashville, Tennessee
http://www.deis.nrc.ca/eic2007/eic2007.htm

October 22 - 24, 2007
Electrical Insulation Conf. / Electrical Manufacturing Expo.
Opryland Hotel, in Nashville, Tennessee
http://www.eic-emexpo.org/

October 22 - 24, 2007

3rd International Wireless Internet Conf.
University of Texas at Austin, Thompson Conference Center
http://wicon.org/

October 23, 2007
2nd International Workshop on Performance Control in Wireless Sensor Networks
University of Texas at Austin, Thompson Conference Center
http://www.pwsn.org/

October 29 - 30, 2007
Lithium Mobile Power 2007
Hilton San Diego Resort, CA
http://www.knowledgepress.com/events/1221437.htm#Overview

October 29 - November 2, 2007
High Voltage and Electrical Insulation Conf.
Altae07
Holiday Inn Cuernavaca, Morelos, Mexico
http://www.altae07.com/principal_ing.html

October 30 - 31, 2007
OEM New England
Boston Convention and Exhibition Center
http://www.devicelink.com/expo/oemne07/

October 31 - November 1, 2007
Huntsville Simulation Conf.
Huntsville, AL
http://www.scs.org/hsc

November 6 - 7, 2007

Remote Monitoring & Networking / Onsite Power
Radisson Ft. McDowell Resort and Casino, Scottsdale, AZ
http://www.remotemagazine.com/rem07_index.htm

November 14 - 16, 2007
Fuel Cells Durability & Performance
Radisson Miami Biscayne Bay - Miami, FL
http://www.knowledgepress.com/events/1221448.htm

November 26 - 30, 2007
IEEE Global Telecommunications Conf.
The Hilton Washington, DC
http://www.ieee-globecom.org/2007/

November 29 - 30, 2007
Lithium Mobile Power
Hilton San Diego Resort, CA
http://www.knowledgepress.com/events/1221437.htm

November 30 – December 1, 2007
All About IEEE 802 Standards in conjunction with IEEE Global Telecommunications Conf.
The Hilton Washington, DC
http://www.ieee.org/web/education/802_Workshop/index.xml

December 3 - 12, 2007
International Joint e-Conference on Systems, Computing Sciences and Software Engineering AND the International Conference on Engineering Education, Instructional Technology, Assessment, and E-learning
University of Bridgeport, CT
http://www.cisse2007online.org

January 7 - 10, 2008
IEEE PES Joint January Technical Com. Meeting
Hyatt Regency San Antonio, TX

WANTED

Wanted – Photographer

We need one or more volunteers to take photographs at our Section events and meetings. If you can not cover all the events and meetings that is OK. If you are interested to help out, please email the Editor, Jim Anderson, at james-w-anderson@ieee.org

Wanted – Articles on "How I became an engineer."

Was it because you were always interested in taking things apart and putting them back together (with "extra pieces")? Was it by chance? Was it because you come from generations of engineers and this was your destiny? What was it? Please send me, Jim Anderson, (james-w-anderson-@ieee.org) your story on how you became interested in Engineering and chose this profession. Every month, we will try to feature an article in the newsletter.

Questions and Answers

Q: Who are the NH Executive Committee members?

A: The list of all the members and their contact information is found on the section website at http://www.ewh.ieee.org/r1/new_hampshire/Officers.html

Q: Who do I contact about suggestions for the newsletter?

A: The Editor, Jim Anderson, can be reached at james-w-anderson@ieee.org

Q: How can I be removed from the mailing list or update my email address for section news?

A: Send email to the NH Section Administrative Assistant, Donna Davis, at NHIEEE@aol.com

Q: How do I start a new society chapter?

A: Please refer to this site for details on eligibility and requirements: http://www.ieee.org/portal/pages/tab/cha/newchap.html

Q: Why doesn't the URL http://www.ieee.org/nh_section work?

A: At the present time the URL is case sensitive and you must use http://www.ieee.org/NH_Section. We hope to have this corrected by IEEE shortly.

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CONTINUED

IEEE NH Computer Society Chapter - IT Seminar

A Survey of Contemporary RFID Solutions and Applications

Bill Freeman of Visible Assets

Southern New Hampshire University, Manchester
Walker Auditorium, Robert Frost Hall
Tuesday, October 23, 2007 from 7:00 - 8:00 pm

For more information contact Prof. James Isaak, j.isaak@snhu.edu

See: http://www.snhu.edu/209.asp for directions

Abstract:

Bill will discuss the available RFID technologies, including the application of some not normally thought of as RFID (WiFi, ZigBee) to RFID applications. Proposed IEEE standard P1902.1, which is based on Visible Assets Incorporated's "RuBee" specifications will covered. Advantages and disadvantages of each will be mentioned, including some application successes and failures. Points for discussion include: the impact of magnetic versus electro-magnetic transmission, active (tag has a battery) versus passive (tag is powered by the reader) approaches, and synchronous versus power detection.

Biography:

Bill received his BS EE from MIT in 1972. He immediately shifted into the digital realm. designing peripheral hardware and cache memory systems at the MIT AI Lab, Rockwell Collins Government Avionics Division, and Bedford Computer (creators of probably the first WYSIWYG publishing system). He then migrated to Unix kernel programming at Alliant Computer Systems (early mini-super computer maker), Concurrent Computer, and Digital (nee Compaq, but not yet HP). Next he developed direct to printed wiring board circuit imaging system at Epic Research, writing machine control applications, spatial distortion compensation programs, and micro-controller firmware. He also did a stint in AJAX web application development at Group Go. He's currently with Visible Assets Incorporated, jack of all trades service at a satellite office in the US.

IEEE NH Computer Society Chapter - IT Seminar

Software Engineering Standards and Gaming Development

Susan "Kathy" Land

Southern New Hampshire University, Manchester
Walker Auditorium, Robert Frost Hall
Tuesday, December 4, 2007 from 7:00 - 8:00 pm

For more information contact Prof. James Isaak, j.isaak@snhu.edu
See: http://www.snhu.edu/209.asp for directions

Biography:

Ms. Land works for MITRE, a not-for-profit organization chartered to work in the public interest. MITRE manages three Federally Funded Research and Development Centers (FFRDCs): one for the Department of Defense (known as the DOD Command, Control, Communications and Intelligence FFRDC), one for the Federal Aviation Administration (the Center for Advanced Aviation System Development), and one for the Internal Revenue Service (the Center for Enterprise Modernization). (source: www.mitre.org).

She has over 20 years of Information Technology related work experience including information management systems programming, database systems development, and enterprise application programming. Ms. Land was recently elected to serve as 1st Vice President of the IEEE Computer Society.

She has extensive experience implementing software process improvement and is a recognized expert in this area having published several books on the subject to include: Practical ISO 9001 Software Process Documentation- Using IEEE Software Engineering Standards, Practical CMMI Software Process Documentation- Using IEEE Software Engineering Standards, and Jumpstart CMM/CMMI Software Process Improvement - Using IEEE Software Engineering Standards.

Ms. Land has a BS, The University of Georgia, 1984, and numerous certifications.

Abstract:

Every organization faces their own unique challenges when developing software, none more so than that of gaming development. This presentation will describe how IEEE Software Engineering Standards have been used to support the processes required for basic software project control and management. It will explore how IEEE Software Engineering Standards have been practically applied to cope with the real-world problems that occur when you present the mix of Department of Defense (DoD) infrastructure (contracting and oversight activities) with the agile requirement to support gaming system development. Examples will be shown from America's Army development efforts.

The IEEE Computer Society currently provides over 40 standards that support software and systems engineering lifecycle activities and methodologies. Many of these directly support the Capability Maturity Model Integration (CMMI) level 2 process areas mapping directly to its goals and practices. The SED is a CMM Level 4 Organization and fully supports Level 2 CMMI-SW methodology. It was important that AA program look at how the CMMI model could be applied, and for tools to help describe classic software engineering methodology to members of the development team. IEEE SS&E standards were used to support a variety of CMMI compliance activities, but more importantly, the standards were used to train staff, and establish and help improve existing software engineering practices.

Joint Society Meeting
The IEEE NH Chapter of the Microwave Theory and Techniques (MTT-S)
and Engineering in Medicine and Biology (EMB-S) Societies
Present:

Through-the-Wall Personnel-Detection Technology

By Dr. Victor Lubecke, Department of Electrical Engineering,
University of Hawaii at Manoa

Monday, October 29, 2007 at 6:00 PM

BAE SYSTEMS Headquarters Building Auditorium,
65 Spit Brook Road, Nashua, NH
1/4 mile east of Everett Turnpike, Exit 1.
For more information contact Tom Perkins at (603) 885-5040, or thomas.perkins@baesystems.com

ABSTRACT

Technology that can be used to unobtrusively detect and monitor the presence of human subjects from a distance and through barriers can be a powerful tool for law enforcement, military, and health monitoring applications. Various technologies from passive millimeter-wave imaging to ultra wideband radar have demonstrated potential for identifying silhouettes, detecting gross motion, and even distinguishing illicit materials and biological characteristics through various obstructions. Compact radar solutions have been used to detect and monitor cardiopulmonary activity of hidden stationary subjects, in some cases leveraging the presence of ambient radio signals to provide a virtually passive means to detect, isolate, and physiologically monitor human subjects through walls.

Practical applications ranging from counter-terrorism to outpatient monitoring require solutions that are accurate, affordable, easily deployed, and minimally tended. An overview of current research efforts addressing these challenges through radio, signal processing, and sensor networking theory and hardware will be presented.

BIOGRAPHY

Victor Lubecke currently conducts research in remote monitoring of human life signs, microwave / millimeter-wave circuits, and MEMS integration. He received his Ph.D. degree in Electrical Engineering from Caltech in 1995, and worked for the NASA Jet Propulsion Laboratory, Riken (Japan), and Bell Laboratories / Lucent Technologies, prior to joining the University of Hawaii in 2003. He is currently a Distinguished Microwave Lecturer of the IEEE, and is actively involved in IEEE MTT and SPIE symposia and publications. He has written over 100 papers for which he has received several awards, has had 4 US patents granted with several more pending for IP which has also received peer recognition, and co-founded a technology start-up company.

The IEEE NH Chapter of the Microwave Theory and Techniques Society
Presents:

Signal Integrity for 5 to 10 Gbps Board Designs

By Jason Boh, Agilent, Andover, MA

Thursday, November 15, 2007 at 6:00 PM

BAE SYSTEMS Headquarters Building Auditorium,
65 Spit Brook Road, Nashua, NH
1/4 mile east of Everett Turnpike, Exit 1.

For more information contact Tom Perkins at (603) 885-5040, or thomas.perkins@baesystems.com

ABSTRACT

Abstract - Signal integrity for 5~10 giga-bits-per-second (Gbps) board designs

Successful, fast and cost-effective high-speed data link design requires an exact process that prevents over-specifying or over-designing hardware. The key to success is a set of integrated EDA tools that combines accurate time-domain simulation of available data and models with comprehensive system-level verification.

The first requirement, accurate simulation, implies determining the correct time-domain response of measured or modeled frequency domain models. Such models are the best way to characterize structures at high data rates above 1 Gbps, however, most time-domain simulators cannot extract accurate results from these models. Without this accuracy, further verification and optimization of the system cannot be performed.

Advanced Design System is the first high frequency EDA environment that meets all of these requirements by providing a new, industry-leading time-domain simulator optimized for use at high data rates, system-level cosimulation and accurate, insightful jitter characterization. Attend the Signal Integrity design seminar and learn how the new technology in Agilent's ADS delivers the capability you need to achieve first-pass success.

BIOGRAPHY

Jason Boh is an applications engineer for Agilent EEsof in Andover, MA. He received his Masters Degree in Electrical Engineering from the University of South Florida. His background includes RF and microwave circuit design, high frequency test & measurement, and device modeling.

The World Affairs Council of New Hampshire cordially invites you to a

NATIONAL SECURITY FORUM

America's Progress - NH's Reality ★ Thursday, October 18, 2007

A Discussion with Senators Gary Hart and Warren Rudman

Moderated by Joseph W. McQuaid, publisher of the NH Union Leader

Walker Auditorium, Frost Hall, Southern New Hampshire University
2500 North River Road, Manchester, NH
5:30 p.m. Cocktail/Hors d'oeuvre Reception
6:30 to 8:00 p.m. Forum

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$60 per person / Seating limited.
Proceeds benefit the World Affairs Council of New Hampshire.

In January 2001, more than seven months before the 9/11 attacks, the Hart Rudman Commission on National Security presented its report recommending that the government create a National Homeland Security Agency to fight terrorist attacks on American soil. Senator Rudman described the report as "the first comprehensive rethinking of national security since Harry Truman in 1947."

This Forum on October 18 is intended to take stock of homeland security since this report. The Forum will look at steps taken to protect the American people and future actions necessary to strengthen national security. It will also discuss security issues facing the Granite State.

The World Affairs Council of New Hampshire Founded in 1954, the World Affairs Council of New Hampshire is the only non-profit, non-partisan organization in New Hampshire devoted solely to fostering learning, discussion and citizen involvement in foreign affairs. Sponsored by Raytheon and Curbstone Financial Management McLane Law Southern New Hampshire University Sheehan Phinney Bass + Green

RSVP Card - Please reply by October 8th / Seating is limited

Yes! I/we will attend Forum. # of tickets:_____ x $60 each. Amount enclosed:$_____.
Unable to attend, but wish to support the works of the World Affairs Council of NH with the enclosed tax-deductible contribution of $_____. Print out and Complete this card and send to me with payment payable to: World Affairs Council of NH, Attention: George Bruno, 2500 North River Road, Manchester, NH 03106

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For questions or directions call Mary Heslin, Executive Director, 603-314-7970 or visit www.wacnh.org

Name_____

Company_____

Address_____

City_____ ST_____ Zip_____

Phone_____ e-mail_____

Kindly list guests below. Joining the conversation are distinguished panelists; David T. Barrett, Director, NH Division of Safety Services; Claire Ebel, Executive Director, ACLU; Mary Petryszyn, Vice President for Civil Security Response, Raytheon Company; and Christopher M. Pope, Director, NH Homeland Security and Emergency Management.