



# THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 55, Number 12

August 2005

## SCOPE NOTES

### August Houston Section News

**here:**  
ESS (Houston Engineering and  
Scientific Society)  
430 Westheimer@Yorktown

**hen:** Thursday, October 27, 2005  
6:00 - 6:30 p.m. Social  
6:30 - 7:30 p.m. Dinner  
7:30 - 8:30 p.m. Speaker

**ost:**  
10.00 - IEEE Members with 48-hour  
advance reservations.  
20.00 - non-members  
5.00 - students  
all (713) 207-IEEE to make your res-  
ervations.



## The Chairman's Message

**Scott Ballew**

The Chairman's Message

Scott Ballew  
Houston Section Chair

See Page 3  
for the Continu-  
ing Education  
Schedule!

IEEE WEB  
ADDRESS

[http://  
\(www.ieee-  
houston.org\)](http://www.ieee-houston.org)

IEEE Houston Section  
P.O. Box  
460443  
Houston, Texas  
77056-8014

# Senior Members

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## Looking for Senior Member Nominations

READ THIS SECTION TO BECOME A SENIOR MEMBER IN THE IEEE.

A goal of our Region is to sponsor as many Senior Members as possible and I am asking your help. The IEEE criteria for Senior Member status is ten years of professional practice including five years of significant performance, and references. (See the nominator letter and application form for clarification on the IEEE website.) If you know an IEEE member who qualifies for Senior Membership, I would like you to nominate him or her by forwarding their nomination to one of the Houston Section Excom members. If you qualify and are not a senior member please reply to one of the Section Excom members. If your are retired and have met the criteria at one time lets get you nominated. Section meetings are the best networking tool to achieve Senior membership.

As an alternative process, you can direct the prospective Senior Member to one of the Houston Section Excom Members. We have a list of several Fellows and Senior Members which we can use for references. The Section will nominate all those qualified who provide a resume and significant performance vita.

Senior Membership in IEEE promotes the value of membership and enhances the status of the member. The is an achievement award lets honor our deserving members.



## IEEE - Houston Section

2005 Scholarship Selection Criteria

In order to promote the interests of the Institute of Electrical & Electronics Engineers (IEEE) - Houston Section, and in support of its dedication to Engineering and Science, scholarship(s) will be awarded annually to selected applicant(s). For 2005, due to the success of the 2004 IEE - Houston Section Annual Scholarship Golf Tournament, up to four (4) \$1,000 scholarships each, will be awarded to both incoming freshman and full time college students who meet the following criteria:

**ELIGIBILITY:** Limited to a full time student enrolled in an accredited college or university who:

- Is a IEEE - Houston Section member's child or relative
- \*\*\*\* OR \*\*\*\*
- Is a member of IEEE (Student Branch or other)

**DISCUSSION:** By restricting eligibility as above, scholarships are made available to those full time students who have an association with IEEE. This places applicants on a "level playing field" before selection criteria are applied to determine the scholarship recipients. All scholarships will be awarded on merit.

### **SELECTION CRITERIA:**

#### **Merit**

- Candidate is enrolled / planning to enroll in an Engineering or Science Curriculum
- His/her cumulative GPA (High School GPA for entering college freshman), SAT or ACT scores
- Discussion paper

#### **DISCUSSION PAPER:**

This document will be a key element in the scholarship selection criteria. Topics should include,

but not be limited to the following:

- Employment experience
- Activities/elected positions
- Career goals
- Honors/Awards
- Personal information
- Why you are seeking this scholarship

To apply, please complete the attached form and mail to:

IEEE - Houston Section  
Attention: Scholarship Committee  
P.O. Box 460443  
Houston, Texas 77056-8014

Deadline for submitting application form and all supporting data is July 22, 2005.



**IEEE - HOUSTON SECTION**  
**2005 SCHOLARSHIP APPLICATION**  
(Applications due July 22, 2005)

Applicant's Full Name: \_\_\_\_\_ Home Phone No.: \_\_\_\_\_

Home Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Email Address: \_\_\_\_\_ College (or Mobile) Phone No.: \_\_\_\_\_

College Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Are you a member of IEEE: ? Yes ? No If so, are you a IEEE Student Chapter Member: ? Yes ? No

IEEE - Houston Section Member (Sponsor's Name): \_\_\_\_\_

Sponsor's IEEE Member No: \_\_\_\_\_ Your IEEE Member No. (If any): \_\_\_\_\_

Student Status: \_\_\_ High School Sr. \_\_\_ Jr. \_\_\_ Soph. \_\_\_ Fresh. \_\_\_

\_\_\_ College or University Sr. \_\_\_ Jr. \_\_\_ Soph. \_\_\_ Fresh. \_\_\_

Cumulative Collegiate GPA (Based on 4.0 max.) substantiated by copy of transcript(s): \_\_\_\_\_

High School GPA - for applicant entering college as freshman: \_\_\_\_\_

- If High School Student - please provide SAT / ACT Scores: \_\_\_\_\_

College or University: \_\_\_\_\_ Location: \_\_\_\_\_

Major or anticipated major: \_\_\_\_\_

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Attach one (1) page essay by student covering:

1. Employment Experience
2. Activities/Elected Positions
3. Personal Information
4. Honors/Awards
5. Career Goals
6. Reasons for seeking this scholarship

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Attach up to three (3) letters of endorsement from former teachers, employers, family and friends.  
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The information provided herewith is correct to the best of my knowledge.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

## IEEE USA Eye On Waashington

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What's New @ IEEE-USA - Eye On Washington, Vol. 2005, No. 15 (29 July 2005)

The latest issue of IEEE-USA's Eye on Washington newsletter is now available on-line. For complete text and links, visit <http://www.ieeeusa.org/policy/eyeonwashington/2005/05eow15.asp>

This week's issue includes:

### DEBATE OVER GROKSTER DECISION CONTINUES WITH FORUM SPONSORED BY CONGRESSIONAL INTERNET CAUCUS

Andrew Greenberg, Chair of the IEEE-USA Intellectual Property Committee, participated in a forum to discuss the recent Supreme Court decision in *Grokster V. MGM*. The forum was sponsored by the Congressional Internet Caucus Advisory Committee. The other panelists were Donald Verrilli, representing MGM and the entertainment industry and a partner at Jenner & Block, and Fred von Lohmann, an Electronic Frontier Foundation staff attorney who defended Grokster – the makers of the file-sharing software program.

### HOUSE SPONSOR GIVES UP TRYING TO PLEASE PATENT BILL INTEREST GROUPS

Months of negotiations between technology and pharmaceutical industries failed to produce a compromise on patent law changes. Thus, Congressman Lamar Smith (R-Tex.), chairman of the House Judiciary Subcommittee on Courts, the Internet and Intellectual Property, will proceed without them, disappointing all concerned. Smith has created his own draft bill (HR 2795) that contains little to please the industries that lobbied for changes to patent law, but, he says, his bill is a, "holistic approach to patent reform."

### HOUSE SCIENCE HEARING: INNOVATION MUST BE PRIORITY OR U.S. WILL CEDE ITS POSITION AS GLOBAL LEADER

Witnesses testifying at a House Science Committee hearing - US Competitiveness: The Innovation Challenge - last week warned that the changing dynamics of the global economy are threatening America's economic position and innovation is crucial to the nation's future economic growth. IEEE-USA staffer Vin O'Neill created a summary of the hearing and the recommendations of each witness that you may view at <http://www.ieeeusa.org/policy/reports/InnovationHearing0705.pdf>

### SENATE HEALTH COMMITTEE APPROVES BILL TO INCREASE USE OF TECHNOLOGY TO

STORE PATIENT INFORMATION ROHRBACHER UNHAPPY WITH BUSINESSES WHO SEND JOBS OVERSEAS HOUSE URGES NHTSA TO CREATE STRONGER C.A.F.E. STANDARDS HOUSE PASSED NASA AUTHORIZATION BILL MSPs FARE NOT-SO-WELL WITH SENATE APPROPRIATORS

In marking up the FY 2006 Labor-HHS-Education Appropriations bill the week of 11 July, Senate appropriators were not as generous to the Education Department's Math and Science Partnership (MSP) program as their counterparts in the House.

ENERGY POLICY ACT of 2005 PROMOTES INVESTMENT, RELIABILITY AND SECURITY, BUT FAILS TO CONFRONT ISSUES OF GREATEST CONCERN (By IEEE-USA Summer Intern Patrick E. Meyer)

WHITE HOUSE ANNOUNCES FY 07 R&D BUDGET PRIORITIES NEW GAO REPORTS FCC RELEASES DATA ON INTERNET ACCESS: CONNECTIONS UP 34 PERCENT IN 2004

## IEEE USA - Cont

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The Federal Communications Commission (FCC) has released a report showing data – as of 31 December 2004 – on high-speed connections to the Internet in the U.S. In the report, the FCC shows data, filed by providers on FCC Form 477 in the FCC's local competition and broadband data gathering program, collected from providers with at least 250 high-speed lines in a state.

### US HOSPITALS WITH HEALTHY IT MAY HAVE LOWER MORTALITY RATES DOD ANNOUNCES 10-YEAR HOMELAND DEFENSE STRATEGY

The Defense Department has released a 10-year strategy outlining sweeping goals and operational concepts under which the U.S. military will act in cyberspace, in space and, if necessary, within the domestic U.S, to protect our security. The 46-page report states, "The terrorist enemy now considers the U.S. homeland a pre-eminent part of the global theater of combat, and so must we."

### NEW REPORT BY NBRE SAYS U.S. LOSING SCIENCE & ENGINEERING GRADS TEXAS PUTTING YET MORE MONEY INTO SCIENCE & TECHNOLOGY and IEEE-USA NOMINATION TO NEW EMERGING TECH COMMITTEE NEW IEEE-USA RESOURCE PAGE ON EHealth

Major E-Health goals for improving the health care system in the U.S. are improving patient safety, improving the interoperability of health information systems, and improving the capability for exchanging patient information while increasing the effectiveness and containing costs. Other critical goals include protecting the privacy of personally-identifiable health records and preventing discrimination based on genetic information.

IEEE-USA also supports policies aiding the transition from our current state of disconnected health information systems to a National Health Information Network (NHIN) that will make use of leading-edge networking technologies, such as web services, mobile communications, and multimedia communications to provide secure and reliable transport of healthcare information. Please visit the IEEE-USA EHealth Resource page, highlighting positions and policy communications, at <http://www.ieeeusa.org/policy/issues/EHealth/index.html>

### IEEE-USA & IEEE COMPUTER SOCIETY SPONSOR FORUM ON CYBERSECURITY

\*\*\*\*\*What's New @ IEEE-USA's Eye on Washington highlights important federal legislative and regulatory developments that affect U.S. engineers and their careers. In addition to this biweekly newsletter, subscribers receive legislative bulletins and action alerts on IEEE-USA priority issues, including: retirement security, employment benefits, research & development funding, computers and information policy, immigration reform, intellectual property protection and privacy of health/medical information.

EDITOR: Erica Wissolik, IEEE-USA, 1828 L Street, N.W., Suite 1202, Washington, DC 20036-5104

## IEEE USA News

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### NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104

IEEE Student Members Serving Technology Policy Summer Internships at IEEE-USA

WASHINGTON (25 July 2005) — Four IEEE student members are serving internships at IEEE-USA this summer. Matt Ezovski, Elizabeth Johnston and Patrick Stokes are participating in the Washington Internships for Students of Engineering (WISE) program, and Patrick Meyer is working with the

IEEE-USA Energy Policy Committee.

The WISE program, which the IEEE has participated in for 14 consecutive years, enables outstanding engineering students to learn how engineers influence public policy on complex technological issues. Each of the eight WISE interns is sponsored by an engineering society, and must present a paper on a current and topical engineering-related public policy issue.

The students' presentations will be at the House Science Committee hearing room in the Rayburn House Office Building (room 2325) on 1 August from 10 a.m. to 3 p.m.

Matt Ezovski, who lives in Slatersville, R.I., is studying electrical engineering and computer and systems engineering at Rensselaer Polytechnic Institute in Troy, N.Y. The rising senior is looking at policy recommendations for deploying biometric passports internationally and domestically.

Elizabeth Johnston, of Fairbanks, Alaska, is majoring in electrical engineering and Russian studies at the University of Alaska. A rising senior, she is working on policy recommendations for hybrid electric vehicles.

Patrick Stokes, of Pflugerville, Texas, is a rising senior majoring in biomedical engineering and economics at the University of Texas. He is interested in privacy and security foundations for interoperability of a National Health Information Network.

Patrick Meyer is IEEE-USA's first Energy Policy Committee intern. His principal focus is to produce a comprehensive analysis of the Energy Policy Act of 2005 (HR.6.) Electricity Title and determine its relation to IEEE-USA interests. A resident of East Granby, Conn., he has written many articles on electricity reliability and interconnectivity, as well as hydrogen fuel cells and advanced nuclear power. You can find a sampling at <http://www.ieeeusa.org/policy/features/EnergyActof2005Update.asp> and <http://www.todayseengineer.org/2005/Jul/energy.asp>.

Meyer will return to the Rochester (N.Y.) Institute of Technology to complete work on his master's degree in science, technology and public policy.

Dr. Steve Watkins, a professor of electrical and computer engineering at the University of Missouri-Rolla, is the WISE program's Faculty-Member-in-Residence. He spent 2004 serving as an IEEE-USA Congressional Fellow in the office of Rep. Dana Rohrabacher (R-Calif.).

For more information on the WISE program, go to <http://www.wise-intern.org/>. Visit <http://www.ieeeusa.org/volunteers/committees/epc/index.html> for more on the IEEE-USA Energy Policy Committee.

## IEEE USA News

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NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104

IEEE-USA President Challenges Colleagues to Promote Membership

WASHINGTON (22 July 2005) — In his latest IEEE-USA president's column, Gerard A. Alphonse calls on U.S. IEEE members to promote membership to their colleagues to help IEEE-USA remain a strong voice for engineers in the nation's capital.

"IEEE-USA understands the imperative to increase member value and control costs," Alphonse said in his column. "The alternative is to see the IEEE's U.S. membership continue to decline and watch our ability to provide valuable products and services to you, the U.S. member, diminish. "We cannot let this happen."

Alphonse encourages U.S. members to participate in membership development programs like the "Member-Get-A-Member" program.

"IEEE-USA's great challenge is to show value for the assessment dollar collected," Alphonse said. "Besides government relations and technology policies, IEEE-USA provides career and member services aimed at enhancing non-technical skills and promoting professional opportunities."

Alphonse said two strategies to stem the tide of decreasing U.S. membership are to increase higher-grade membership and develop income sources other than the U.S. assessment.

"The key is to identify products and services that can be provided to our members at little or no cost as a member service, while generating sales among non-member consumers," he said.

You can read the column at

<http://www.ieeeusa.org/communications/presidentscolumn/Alphonse/alphonsejul-aug05.html>.

(Note to editors: A photo of President Alphonse is available upon request.)

IEEE-USA is an organizational unit of the IEEE. It was created in 1973 to advance the public good and promote the careers and public policy interests of the more than 220,000 technology professionals who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society.

For more information, go to <http://www.ieeeusa.org>.

Contact: Chris McManes

Senior Public Relations Coordinator

Phone: + 1 202 785 0017, ext. 8356

E-Mail: [c.mcmanes@ieee.org](mailto:c.mcmanes@ieee.org)

# IEEE CAREER ALERT

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IEEE CAREER ALERT for 20 Jul 2005

Your weekly report on jobs, education, management, and the engineering workplace, from the editors of

IEEE Spectrum

IN THIS ISSUE:

1. The Art of the Deal
2. Practice Makes Perfect
3. The Advantages of Networking
4. Why So Many People Don't Use Networks

On 20 September 2005, IEEE Spectrum will host an online Career Accelerator Forum. Get insight and advice on getting an advanced degree, staying ahead in your field, landing your dream job and even changing your career. Plus, this interactive event makes it possible for you to question our expert panel - all from the convenience of your desktop!

For more information and a list of panelists, visit: <[http://www.spectrum.ieee.org/cef\\_info](http://www.spectrum.ieee.org/cef_info)>

To sign up, go to: <<http://www.spectrum.ieee.org/cef>>

## 1. The Art of the Deal

The rules of negotiation are the same when hammering out your compensation package as they are for any other business deal. And according to a Wall Street Journal article, there are several things you should consider before making your opening gambit. Can you clearly explain why you deserve what you're asking for? Are you dealing from a position of strength? What is your market value? Are you prepared to bet that your boss will match another firm's offer? Read on at:

<[http://careers.telecoms.com/marlin/30000000461/DISPLAY\\_SITE\\_ELEMENT/siteElementId/20001025475](http://careers.telecoms.com/marlin/30000000461/DISPLAY_SITE_ELEMENT/siteElementId/20001025475)>

## 2. Practice Makes Perfect

You've studied hard and are about to take an IT certification exam that may affect your salary or your ability to land a coveted job. To make sure you're ready, take a practice exam to find out the depth of

your knowledge and acclimate yourself to the type of questions that will appear on the test. For advice on what to look for in a certification test web site, read on at:

<<http://technology.monster.com/articles/testing/>>

## 3. The Advantages of Networking

How do you take advantage of the so-called hidden job market, where most job opportunities lie, but are filled largely by word of mouth? Increasing your contacts increases your chances. This takes a concerted effort at networking, including developing a system for keeping up with information about the people you meet, making a point to stay in touch on a regular basis, and setting a goal for making new contacts. For seven steps to successful networking, read on at:

## IEEE CAREER ALERT

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<[http://intelinfo.tech-engine.com/candidates/careerguide\\_careernews/page02.asp](http://intelinfo.tech-engine.com/candidates/careerguide_careernews/page02.asp)>

### 4. Why Many People Don't Network

According to the U.S. Bureau of Labor Statistics, only 18 percent of the 7.2 million people who actively looked for a job in the United States last year used friends or relatives as a method of trying to find work. Why? Despite wide agreement that, when looking for a job, who you know is often more important than what you know, networking events have gotten a bad rap and few people take networking seriously. Too many industry meet and greets are merely scavenger hunts to see who can collect the most business cards, said Dave Opton, chief executive of ExecuNet, a career management and recruitment network, to the Wall Street Journal. For more on the pros and cons of networking, read on at:

<[http://www.careerjournalasia.com/columnists/cubicleculture/20050714-cubicle.html?cjapos=home\\_whatsnew\\_major](http://www.careerjournalasia.com/columnists/cubicleculture/20050714-cubicle.html?cjapos=home_whatsnew_major)>

+++++ANNOUNCEMENT+++++

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 electrotechnology 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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The Pocket Scope is the newsletter of the Houston Section of the Institute of Electrical and Electronics Engineer (IEEE). The Houston Section address is: IEEE Houston Section, P.O. Box 460014, Houston, Texas 77056-8014.

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Advertising rates are listed on the IEEE Houston Section website and include publishing in The Pocket Scope, ad on the website, and within the monthly e-mail update.

IEEE members make change of address notices via the IEEE website: [www.ieee.org](http://www.ieee.org).

Newsletter Staff

Editors:	Lisa Nichols-Dunn, 281-426-4784
	E-mail: <a href="mailto:lnicholsdunn@aol.com">lnicholsdunn@aol.com</a>
Advertising:	281-426-4784



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IEEE Houston Section  
P.O. Box 460443  
Houston, TX 77056-8014

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