



## Contents

- Forgot to renew?
- IEEE Oregon Section March Meetings
- From the Editor's Desk
- New Oregon Section Senior Members
- Bruce Angwin Scholarship Deadline May 1
- Intel Science Expo Needs Judges
- Computational Intelligence Intersects Marketing
- William Wulf to Speak on Imperfect Design
- Offshoring Major Cause of Tech Unemployment
- U.S. Tech Employment Falls More Than 220K
- Members Begin IEEE-USA Govt Fellowships
- California School Wins Future City Competition
- IEEE Launches Membership Portal
- Educational Activities Board News
- 2004 IEEE-USA Award Recipients
- IEEE-USA Brief Before Court of Appeals
- Highlights from Today's Engineer Webzine

## Forgot to Renew Your Membership?

On Feb 26, IEEE ran the "Terminator" on all members who have not yet renewed. Although membership services and subscriptions have been discontinued as of the end of February, they will be reinstated immediately upon payment of this year's dues. If past experience is any guide, many of these members intended to renew and inadvertently allowed their membership to lapse simply because they forgot or procrastinated. An e-mail or phone call from you may be all it takes. Lapsed members can renew their membership online at <http://www.ieee.org/renew> by clicking on the "renew" link. Their IEEE Web account, or Member number and PIN are needed for access.

---

## IEEE Oregon Section March Meetings

For details on latest Meetings List see <http://www.ieee-or.org/events/>

### PACE (PROFESSIONAL ACTIVITIES) MEETING

TOPIC: Essential Skills for Engineers in Today's Fast-Paced Competitive World

SPEAKER: Gary C. Hinkle

DATE: Tuesday, March 22, 2005

TIME: 6:30 PM - 8:00 PM

Doors open 6:00PM

LOCATION: Oregon Graduate Institute(OGI),  
Wilson Center Main Dining Room  
See directions below.

COST: FREE and open to the public

REGISTRATION: See [www.ieee-or.org/events](http://www.ieee-or.org/events)

### EMC Chapter Meeting

Topic: Wireless Medical Telemetry Devices

Speaker: Greg Kiemel, Director of Engineering  
Northwest EMC, Inc.,

When: Wednesday March 23rd, 2005,  
6:30pm - 8:30pm

Meeting Place: U of P Engineering Hall 301  
(see building #22 on the Campus Map)

Registration: See [www.ieee-or.org/events](http://www.ieee-or.org/events)

### CPMT Society Chapter Seminar

Topic: Why Conversion to Lead-Free is Necessary, and  
its Impact on Your Business

Speaker: Ray Prasad, Ray Prasad Consultancy Group

Date & Time: 6:30pm Thursday, 31st March, 2005

(6:30pm for pizza & soda; presentation at 7pm)

Cost: Free and open to public (registration required).

To register: <http://cpd.ogi.edu/class.asp?n=05-IEEE-0331>

Venue: OGI Wilson Clark Center Dining Room

### MTT & ED Chapter Meeting

Topic: The Life of James Clerk Maxwell

Speaker: Dr. James C. Rautio, Pres., Sonnet Software

When: Tuesday, April 12, 6:00PM (pizza and soft drinks)  
presentation at 6:30PM

Where: Oregon Graduate Institute, Paul Clayton Building  
(#2), Room 401

### EMC / PRODUCT SAFETY 2005 COLLOQUIUM

Topic: Product Compliance

Date: Monday, April 25, 2005 8:30AM-5:30PM

Location: Double Tree Hotel Portland- Jantzen Beach

Cost: Members \$150 by Apr 5, \$175 after Apr 5

Registration: [www.ieee-or.org/events](http://www.ieee-or.org/events)

### COMMUNICATION SOCIETY Upcoming Workshops

- **Wireless LAN Security 4-day Workshop**

Portland, Oregon, May 10<sup>th</sup> ~ 13<sup>th</sup>, 2005

Venue: Kingstad Place for Meetings, Beaverton,  
Oregon

For more info and registration go to <http://www.ieee-or.org/events/cwsp/>

- **Wireless LAN Analysis (4-day workshop)**

Date: Jun 14 - Jun 17, 2005

Venue: Kingstad Place for Meetings, Beaverton, Oregon

For more info and registration go to <http://www.ieee.org/events/cwap/>

### From the Editor's Desk

by Allen G. Taylor

This month's BEEEP features two stories that both relate to the offshoring of high technology jobs. One chronicles the rise in high tech unemployment and the other the drop in high tech employment. Both articles ascribe at least part of the reason for these disturbing trends to offshoring. A survey conducted by IEEE-USA found that not only are jobs being exported overseas, but those that remain here are doing so at reduced salaries.

In the 1950's Japanese manufacturers out-competed US manufacturers of radios and TVs and essentially sealed the fates of the once-dominant US companies in those markets. A little later the superior quality of Japanese cars started loosening the grip of US automobile manufacturers on the domestic auto market. The Toyota Corolla is the largest selling automobile model of all time. Nowadays, everything from cell phones to teddy bears can be made more cheaply in China than in America. Technical support call centers have largely moved to India, and so has a significant amount of design engineering. China is in the process of establishing 30 new MIT-class engineering schools.

Can it happen to you? Is YOUR job in danger of being offshored? China and India are cranking out more new engineers and technologists than US universities can begin to produce. These people are highly competent, eager, and willing to work for much less than American engineers are accustomed to receiving. The economics of offshoring are so compelling that American companies cannot ignore them. Artificial protectionist laws imposed by government cannot stand up against hard reality. The conditions that US engineers have enjoyed for decades are coming to an end. Are you ready for the shift? Not all US technology jobs are disappearing. The ones that are increasing are primarily in management, since the offshore operations must be coordinated by managers in the parent US companies. The other growing segment of the job market is in positions that require face-to-face contact with US customers. This means things still look good for managers and sales engineers. For the rest of us, things may not look so rosy. Survivors will "go with the

flow" and reinvent themselves. What will YOU do? Send me your thoughts at [allen.taylor@ieee.org](mailto:allen.taylor@ieee.org).

As you may know, the IEEE Neural Network Society was recently renamed and refocused, emerging as the IEEE Computer Intelligence Society. Professor Garrison Greenwood of PSU and I are interested in forming a CIS chapter in the Oregon Section. We need society members to sign a petition. Please contact me if you are interested.

### New Senior Members

Carol A. Friz  
 Dan W. Hammerstrom  
 Kaizad Mistry  
 Robert G. Sparkes  
 David R. Varner

Congratulations to our new Senior Members!  
 For information on Senior Membership, contact our Membership Chair, Jim Rooks at [james.rooks@ieee.org](mailto:james.rooks@ieee.org)

### Announcing 2005 Bruce Angwin Memorial Scholarship

Formerly the WESCON Scholarship, this scholarship is available to High School Juniors ONLY, graduating in 2006. The first prize award is \$5000, second prize \$3000. Deadline is **MAY 1**. Last year there were under 100 applicants! For details, see <http://coe.isu.edu/ieee/wescon/>

### Intel Science Expo Needs Judges

The 22nd annual Intel Northwest Science Expo needs judges for the state championship science fair on Friday, April 1, at Portland State University. BPA will again have a booth at this event. Middle and high school students from all over Oregon and Southwest Washington will bring 550 projects in a range of science and math fields. They will include behavioral and social sciences, computer sciences, zoology, botany, physics and math.

These students appreciate talking to and being recognized by experts in their field. Many science fair judges return year after year because they enjoy it so much. Here's your chance to do it again or to volunteer for the first time. BPA employees may want to give their time for this worthwhile community event. Otherwise, employees may

get up to two hours of administrative leave to volunteer, with the approval of their supervisors.

The expo sponsors said they especially need judges in these fields: botany, microbiology, medical and health, and zoology. They will have training March 31 from 6 to 8 p.m. at Portland State University.

For more information or to register to help, go to the Intel Expo Web site <<http://www.nwse.org/>>. Click on the Register Here button on the left. Returning judges can use their password from last year to log on.

### **Computational Intelligence Intersects Marketing** by Allen G. Taylor

On March 8, Steve Rosenbaum, President and CEO of Pop Art ([www.popart.com](http://www.popart.com)), a Portland Web development company gave a talk to Internet Professionals Northwest entitled "What is Portfolio Theory, and How is it Used in Marketing?" As Steve described it, portfolio theory provides a structured way to market a company's products or services. He specifically applied it to Internet marketing. What is interesting from an engineering perspective is that portfolio theory uses the idea of approaching the Pareto optimum of the risk/return space to maximize the effect of marketing dollars spent. This is the same approach that engineers involved in computational intelligence use to maximize the performance of an electronic design. As mentioned elsewhere in this issue, a local chapter of the IEEE Computational Intelligence Society is forming now in Oregon. One of the most interesting things about this emerging field is the tremendous breadth of its applicability. You can use it to design a satellite radio system or to decide how best to market stuffed plush penguin toys to the parents of young children.

### **William Wulf to Speak on Imperfect Design**

Oregon's Science, Technology and Society Lecture Series concludes its Fifteenth season at the Arlene Schnitzer Concert Hall on Thursday, April 14th, 2005. The series explores the latest discoveries dramatically altering our understanding of the universe and ourselves. A reception in the lobby of the Schnitzer, for all ticket-holders, begins at 6:00 p.m. Presentations at 7:00 p.m. Tickets are available from Ticketmaster.

Imperfect Design  
Engineering as a Human Endeavour

Dr. William Wulf  
President, National Academy of Engineering  
Vice Chair, National Research Council

"Growing global competition and the subsequent restructuring of industry, the shift from defense to civilian work, the use of new materials and biological processes, and the explosion of information technology - both as part of the process of engineering and as part of its product - have dramatically and irreversibly changed how engineers work."

William A. Wulf is on leave from the University of Virginia, Charlottesville, where he is a University Professor and AT&T Professor of Engineering and Applied Sciences.

What are the implications of this reality as engineering designs become evermore complex? Wulf believes that new ethical problems are emerging for the profession. We are building systems, whether for computer networks or space travel, whose future actions are literally impossible to predict.

Wulf asks, "How does one ethically build a system when you know there will be unintended, possibly catastrophic behaviors as a result—how do you act right under those circumstances?"

He says this problem has already "come back to bite us in simple ways." We often attribute security flaws in computers to viruses. Instead, Wulf cites a study where at least half of the breaches resulted from the system "performing exactly per specifications. But the specifications didn't foresee a way they could be used to defeat the system."

One conclusion: "If you can't get the specs right, better not assume the output will be right."

### **Offshoring Is Major Cause of Technical Unemployment, IEEE-USA Survey Reveals**

WASHINGTON (8 March 2005) -- Offshoring is the second-highest cause of unemployment among U.S. technical professionals, according to the 2004 IEEE-USA Unemployment Survey released today.

The leading cause of unemployment, cited by 62 percent of U.S. IEEE members who reported being laid off, was a business downturn. Fifteen percent reported that their jobs were transferred offshore, while 10 percent pegged merger or acquisition as the cause of their layoff.

A correlation between results of the Unemployment Survey and the 2004 IEEE-USA Salary & Fringe Benefit Survey, which showed the first median income decline for U.S. IEEE members in 31 years, revealed that people in industries reporting the largest drop in income also reported the highest percentage of unemployment because of offshoring. The following chart illustrates this:

Industry	% Drop in Income	% Offshoring Displacement
Electrical/Electronic Manufacturing	2.5	16.2
Computers	2.4	17.4
Communications	1.8	15.2

"This data supports our contention that offshoring not only contributes significantly to U.S. high-tech unemployment, but also suppresses wages," IEEE-USA President Gerard Alphonse said. "Our concerns extend beyond job loss and depressed incomes to threats to our nation's innovation infrastructure. Because innovation tends to follow jobs, key drivers of our economic prosperity could be lost."

The 2004 Unemployment Survey was sent to 5,329 U.S. IEEE members who reported being laid off at some point in the 2003-04 membership years. This represents an 80.3 percent increase in members reporting unemployment over the 2002 survey. Dr. Laura Langbein, a professor of public affairs at The American University in Washington, D.C., analyzed and reported the results, which are posted at <http://www.ieeeusa.org/careers/pdf/EmploymentSurvey2004Report.pdf>.

Other findings reveal that 37 percent of the 988 respondents said they considered leaving engineering entirely, and 41 percent said they would not recommend the profession to their children.

"Another trend is that employers are providing much less service for laid-off workers than they did before," Langbein wrote. "Severance was provided in only 54 percent of the cases (compared with 90 percent in 2002) and extended benefits in only 27 percent of the cases (compared with 48 percent in 2002)."

---

## U.S. Technical Employment Falls by More Than 220,000 Workers from 2000 to 2004

WASHINGTON (3 March 2005) -- The number of employed U.S. technical workers has fallen by 221,000 in six major computer and engineering job classifications from 2000 to 2004, according to data compiled by the U.S. Department of Labor's Bureau of Labor Statistics (BLS).

The largest drops occurred among computer programmers, followed by electrical and electronics engineers, then computer scientists and systems analysts. These declines were offset by substantial employment increases for computer and information systems managers, computer hardware engineers and computer software engineers.

"The drop in computer programmers and rise in managers reflects the trend toward offshoring of programming jobs and the resulting need for professionals to manage outsourced projects," IEEE-USA President Gerard A. Alphonse said.

According to the BLS, computer programmers have taken the biggest hit, with a drop of more than 24 percent -- from 745,000 in 2000 to 564,000 in 2004. In addition, the number of employed electrical and electronics engineers shrunk by 101,000, from 444,000 in 2000 to 343,000 last year, a decrease of nearly 23 percent. Computer scientists and systems analysts have experienced similar losses, dropping more than 16 percent, from 835,000 in 2000 to 700,000 in 2004.

However, employed computer and information systems managers have jumped from 228,000 in 2000 to 337,000 last year, a dramatic increase of almost 48 percent. Computer hardware engineers rose from 83,000 in 2000 to 96,000 in 2004, a nearly 16 percent increase. Employed computer software engineers have risen by 74,000, from 739,000 in 2000 to 813,000 in 2004, a 10 percent increase.

The table below summarizes the BLS data:

Job Classification	2000	2004	Change	%
Computer Hardware Engineers	83,000	96,000	+13,000	+15.7
Computer & Info. Systems Managers	228,000	337,000	+109,000	+47.8
Computer Programmers	745,000	564,000	-181,000	-24.3
Computer Scientists & Systems	835,000	700,000	-135,000	-16.2

Analysts				
Computer Software Engineers	739,000	813,000	+74,000	+10.0
Electrical & Electronics Engineers	444,000	343,000	-101,000	-22.7
Total	3,074,000	2,853,000	-221,000	-7.2

---

### Four U.S. IEEE Members Begin IEEE-USA Government Fellowships

Randall Brouwer, Gordon Day, Norman Schneidewind and Nick Zayed began their IEEE-USA Government Fellowships in January. Each is advising government leaders on key technology policy issues and helping them understand the key role engineers play in national security, innovation and economic prosperity.

Brouwer, professor and former chair of the engineering department at Calvin College in Grand Rapids, Mich., is advising Rep. Dana Rohrabacher (R-Calif.). The congressman is a member of the House Science Committee, chaired its Space and Aeronautics Subcommittee for the past eight years, and authored the IEEE-USA-supported Commercial Space Launch Amendments Act that President Bush signed into law on 23 December 2004. (See related story at <http://www.todaysengineer.org/2005/Jan/x-prize.asp>.) Rep. Rohrabacher is also a member of the Congressional Research and Development Caucus, of which IEEE-USA is an advisory committee member.

Day, a retired division chief for the National Institute of Standards and Technology in Boulder, Colo., is advising Sen. Jay Rockefeller (D-W.Va.) on science and technology issues, particularly communications and homeland security. Sen. Rockefeller serves on the Senate Commerce, Science and Transportation Committee, and is ranking member of the Aviation Subcommittee.

Schneidewind is a professor of information sciences at the Naval Postgraduate School in Monterey, Calif. He's supporting Sen. Daniel Akaka (D-Hawaii) and will act as the science adviser to the Senate Homeland Security and Governmental Affairs Committee's Subcommittee on Financial Management, the Budget and International Security.

Zayed is a communications systems engineer with the Northrop Grumman Corp. in Redondo Beach, Calif. He is working in the State Department's Office of Science and

Technology Cooperation. The mission of the office is to provide, promote and facilitate policy coordination and international science and technology cooperation among federal technical agencies and their overseas counterparts.

For more information on IEEE-USA's Government Fellowship program, visit <http://www.ieeeusa.org/policy/govfel/index.html>, or contact Erica Wissolik, IEEE-USA program manager, government activities, at [e.wissolik@ieee.org](mailto:e.wissolik@ieee.org).

---

### California Middle School Wins IEEE-USA Future City Competition Award

WASHINGTON (25 February 2005) -- Martin Luther King Jr. Middle School of Oceanside, Calif., won the fifth IEEE-USA Best Communications System Award at the national finals of the National Engineers Week Future City Competition on Wednesday. The honor, one of 31 special awards presented at the Hyatt Regency Crystal City in Arlington, Va., was for the most "efficient and accurate communications system."

Students Karina Coscuna, Alisa Wyman and Peter Vo comprised the team with King teacher sponsor Joanne Norlander and engineer mentor Paul Vo. The team advanced to Washington by winning the Southern California regional competition last month. Its city, Constante Fonte (Portuguese for "Constant Source"), is set in the Amazon rain forest in 2150.

The city's "NET" communications system, which stands for "Nano Ear and Teeth," consists of a nanotechnology-based chip embedded in a person's eardrum and tooth. A wireless voice signal is transmitted to a communications tower, then to the "head end" at city hall, back to a tower and out to the recipient. The system, as described by the students, can translate any language into the hearer's native tongue.

The award, funded by the IEEE-USA Precollege Education Committee, was judged by IEEE members Lowell Smith of Fairfax, Va., Lee Stogner of Greenville, S.C., and Ananthram Swami of Silver Spring, Md.

"The students' ideas were practical and they had a good grounding in what was possible," Stogner said. "They recognized they had to build on an existing technology to provide a communications infrastructure that people could use in the office and on a personal level."

IEEE Senior Member Michael Andrews, co-regional coordinator of the Phoenix area competition, presented each team member with a plaque. Each student will also receive a \$100 U.S. Savings Bond. King also garnered the Most Innovative Power Generation System Award from the U.S. Navy Nuclear Propulsion Program.

Other IEEE members serving as regional coordinators included Jean Eason (Dallas/Fort Worth); Todd Hiemer (Oklahoma); Osama Mohammed (Florida); and Zafar Taqvi (Houston).

The Future City Competition, which IEEE-USA introduced to Engineers Week in 1993, is designed to encourage the future generation of engineers. Seventh and eighth grade students create their own vision of a city of tomorrow, working first on computer and then constructing three-dimensional scale models. About 30,000 students competed this past year. A longitudinal study of the Future City Competition, funded by the IEEE in 2004, found that half of the respondents who had participated in the competition said they would like to pursue engineering in high school and college.

Louisiana regional champion St. Thomas More School won the overall competition Wednesday. Go to [http://www.eweek.org/site/News/Eweek/2005\\_FC\\_champions.shtml](http://www.eweek.org/site/News/Eweek/2005_FC_champions.shtml) for more information.

---

## IEEE LAUNCHES MEMBERSHIP PORTAL

The IEEE has launched its new membership portal along with a members-only area called myIEEE.

The public site boasts the value and benefits of IEEE membership while showcasing the availability of additional membership opportunities, such as Societies, Affinity Groups and the Standards Association. Links to member-benefit information are consolidated into drop-down menus on the top navigation bar. Also included are a "Featured Benefit" module, member profiles, membership-related announcements and more.

Members who login to the myIEEE area with their IEEE Web account will see personalized information, such as their grade, section affiliation and additional active memberships. A new feature called "Service Advisor" uses a member's technical interest profile to offer recommendations for IEEE membership offerings, conferences and publications. Links to the most commonly-used membership-management functions ? joining the IEEE, renewing membership, adding services

and changing profile information ? are included in a single module for easy access.

The membership portal and myIEEE project was initiated in response to member feedback about the IEEE Web presence, as well as to improve communications about the value of IEEE membership.

The portal is accessible from the Membership menu on the left navigation bar of the main IEEE Web site. The URL is <http://www.ieee.org/myieee>.

---

## Educational Activities Board News

### HISTORY CENTER MILESTONES

2004 saw seven Milestones dedications, a record! This year seems to be at least on the same pace. Three new Milestones were approved by the IEEE ExCom at their February meeting, four more nominations are being considered by the IEEE History Committee, and several other promising preliminary proposals have been approved. More information can be found at [http://www.ieee.org/organizations/history\\_center/milestones\\_program.html](http://www.ieee.org/organizations/history_center/milestones_program.html).

### HISTORICAL PRESENTATION

IEEE's Regional Activities Department is promoting the use by Sections of IEEE's Net Meeting service to deliver presentations to members who would otherwise have difficulty attending organized meetings at physical locations. To help do this, while at the same time providing content of interest to Sections, History Center Staff Director Dr. Michael Geselowitz delivered a lecture to members of Region 1 entitled "Looking Back to the Future: The History of IEEE" (Region 1 was chosen for this pilot presentation for time-zone reasons). Contact RAD's Denise Maestri at [d.maestri@ieee.org](mailto:d.maestri@ieee.org) for more information on this program.

### THE IEEE VIRTUAL MUSEUM

The IEEE Virtual Museum (<http://www.ieee.org/museum>) is IEEE's award-winning outreach site for pre-college youth and the general public that uniquely combines engineering principles with the history and social context of technology. The IEEE Palm Beach Section has been adapting selections from the IEEE Virtual Museum as games in its eBulletin to entertain its members and to give the members tools to promote IEEE to the broader community. The eBulletin can be accessed from <http://ewh.ieee.org/r3/palmbeach/>.

Visit the following web pages for the latest news from IEEE Educational Activities and the IEEE History Center:

IEEE EAB Newswire,

<http://www.ieee.org/education/newswire>

IEEE History Center What's News,

[http://www.ieee.org/organizations/history\\_center/whats\\_news.html](http://www.ieee.org/organizations/history_center/whats_news.html)

### **Congressman Rohrabacher and Former IEEE-USA Board Member Head 2004 IEEE-USA Award Recipients**

WASHINGTON (9 February 2005) -- Rep. Dana Rohrabacher (R-Calif.), former chairman of the House Science Committee's Subcommittee on Space and Aeronautics; and Dr. Charles P. Rubenstein, a 2003 member of the IEEE-USA Board of Directors and Operating Committee, will receive IEEE-USA professional awards.

Rohrabacher and Rubenstein join fellow IEEE-USA award recipients in recognition of their professionalism and technical achievements, as well as literary contributions to public awareness and understanding of the engineering profession in the United States.

Rohrabacher is being honored with the IEEE-USA Distinguished Public Service Award "for long-term support of IEEE-USA's Congressional Fellowship program and leadership on federal policy issues of concern to the engineering community." Steve Watkins served as an IEEE-USA Congressional Fellow last year in Rohrabacher's office, and Randall Brouwer holds the position in 2005.

Rubenstein, who lives in Massapequa, N.Y., is receiving IEEE-USA's highest honor, the Robert S. Walleigh Distinguished Contributions to Engineering Professionalism Award. An IEEE senior member and active volunteer, Rubenstein works as a tenured professor of information science at New York's Pratt Institute graduate School of Information and Library Science. He is being recognized "for sustained leadership and inspiration in professional activities within the IEEE Divisions and Regions."

IEEE-USA's distinguished awards are administered under its Awards and Recognition Committee and approved by the IEEE-USA Board of Directors. They will be presented at a 12 March awards ceremony held in conjunction with the IEEE-USA Leadership Workshop in Tucson, Ariz. (<http://www.ieeeusa.org/calendar/conferences/2005workshop/default.asp>).

### **IEEE-USA Supports Reverse Engineering in Brief Before Eighth Circuit Court of Appeals**

IEEE-USA filed an amicus curiae brief on 24 January in support of reverse engineering for interoperability in the U.S. Court of Appeals for the Eighth Circuit in the case of Blizzard Entertainment v. Internet Gateway (No. 04-3654).

IEEE-USA's "friend-of-the-court" brief seeks reversal of a September 2004 Federal District Court decision in favor of Blizzard, a computer game company. The Court basically ruled that by opening the shrink wrap of a software package, or clicking on a button during installation, the end user gives up fair use rights, including reverse engineering, granted under Section 107 of the Copyright Act.

Reverse engineering is a common and recognized practice, particularly in computer software, and is extremely important to technological advancement. IEEE-USA defines reverse engineering as the discovery by engineering techniques of the underlying ideas and principles that govern how a machine, computer program or other technological device works.

"Ultimately, the greatest benefits from reverse engineering are reaped by the public at large," IEEE-USA's brief said. "The positive exploitation of ideas expressed in copyrighted works over the past two decades is readily apparent: advanced, competitive computer software industries have fueled the explosive and enlightening development of the Internet as well as many technology-based modern products."

According to IEEE-USA, by exploiting shrink-wrap and click-wrap agreements, software publishers have attempted to use state-based contract law to trump fair-use rights granted under federal law. The organization believes that such agreements pose a danger to "the nation's intellectual property system" and will chill innovation.

## Highlights from IEEE-USA Today's Engineer Webzine

### 1. Latest \*IEEE-USA TODAY'S ENGINEER\* Webzine Covers Nanotechnology, Downsizing, Modernizing The Electric Power Grid, Retirement Savings, Team Dynamics

Also, catch a "Spotlight" interview with IEEE-USA President Gerry Alphonse; a "Students' Voice" column on "Becoming Wise"; a "Your Engineering Heritage" feature on Francis Thomas Bacon; a "World Bytes" column on excessive medication; a "Pulse" feature on the L-1 and H-1B Visa Provisions in the FY05 Budget; and a "Capitol Shavings" column on Social Security.

Read the March 2005 edition of IEEE-USA TODAY'S ENGINEER online at: <http://www.todaysengineer.org>

### 2. Engineers Without Borders, Future City Competition, 'New Faces' Highlight Engineers Week, Feb. 20-26

Highlighting Engineers Week, Feb.20-26: At the National Press Club, on 22 Feb., the United Engineering Foundation presented a check for \$25,000 to Engineers Without Borders, in a collaborative effort of the engineering community to aid tsunami relief efforts in Sri Lanka; (2) Martin Luther King Middle School of Oceanside, Calif., won the fifth IEEE-USA Best Communication System Award at the Future City Competition; and (3) Mark Hersam, a U.S. IEEE Member and an assistant professor in Materials Science and Engineering at Northwestern University, was named one of EWeek's "New Faces of Engineering."

For more information on the Engineers Without Borders contribution, read the news release at: <http://www.ieeeusa.org/communications/releases/2005/uef-022205.asp>

See the press release on the Future City Competition at: <http://www.ieeeusa.org/communications/releases/2005/022505pr.asp>

For more information on "New Faces of Engineering," go to: <http://www.eweek.org/site/Engineers/newfaces2005/index.shtml>

### 3. Sign Up For \*What's New @ Ieee-Usa Eye On Washington\* Update

IEEE-USA EYE ON WASHINGTON is a free, bi-weekly, government activities update that highlights important federal legislative and regulatory developments that affect U.S. engineers and their careers. Subscribers will also receive legislative bulletins and action alerts on IEEE-USA public policy priority issues.

To subscribe, visit:

<http://www.ieeeusa.org/communications/emailupdates/>

To see the latest issue, go to:

<http://www.ieeeusa.org/policy/EYEONWASHINGTON/2005/05eow04.html>

## OGI Seminars

See <http://cpd.ogi.edu/>

- John Morgan (CEO, HemCon)  
Tuesday, March 15 6:15 PM pizza, soft drinks, networking 7:00 PM presentation FREE
- Real-World Entrepreneurship  
<http://cpd.ogi.edu/class.asp?n=05-ENT-01>  
Beginning May 12, a six part series providing the knowledge, skills, and tools to turn your idea into a successful venture or lead your emerging company to success.

## IEEE Oregon Section 2005 Contacts

Chair	Dan Arnold	360-817-5699
Vice Chair	Bob Sparkes	503-547-2396
Treasurer	OPEN	
Secretary	Hamid Sharifnia	503-813-6935
Past Chair	Ed Perkins	503-612-9397
BEEP Editor	Allen Taylor	503-656-0831

Editorial submissions are welcome and should be made by the 25<sup>th</sup> of the month preceding publication. Send all items to the Editor, Allen Taylor, email: [allen.taylor@ieee.org](mailto:allen.taylor@ieee.org)

Administrative inquiries should be directed to the Section Chair, Dan Arnold, email: [Daniel.Arnold@us.ul.com](mailto:Daniel.Arnold@us.ul.com)