

The



IEEE Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NJ Computer Chapter:

Home Networking and Setting up a Low-Cost Personal/Business Web Site

On Thursday, August 21st, 2003, the IEEE North Jersey Section Computer Chapter will host a presentation on "Home Networking and Setting up a Low-Cost Personal/Business Web Site" by Frank Middleton.

About the Talk

Many people have several computers at home, including one used for business. The first part of the talk will cover ways of connecting them together so they can share Internet access, printers, etc., economically and securely.

The second part will discuss options for setting up a personal/business web site at costs ranging from zero to \$100 or so per year, and the pros and cons of each approach. Also included, a brief overview of mailing lists. A glossary and a list of related resources will be provided.

The focus in both parts is on deployment and security, not on programming or web site design and implementation, although we will touch briefly on IP networking and DNS. A copy of the presentation will be available on the Internet after the talk at http://www.apogeect.com/html/home_ws/.

About the Speaker

Frank Middleton is President of Apogee Communications Technologies, Inc. (<http://www.apogeect.com>), providing consulting services in the New York Metro area in communications technologies - security, networking, systems architecture, design, implementation, certification, training and deployment.

Frank has more than 20 years of experience in networking, security, infrastructure and applications architecture, design and implementation, is a long time member of IEEE and the ACM, and has a Masters in Computer Science from the Courant Institute of Mathematics, New York University. He can be reached at (973) 543-9324 or f.middleton@apogeect.com.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends and network during the free pre-meeting buffet starting at 6 PM.

Time: 7:00 PM, Thursday, August 21, pre-meeting buffet at 6:00 PM.

Place: Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, (973) 285-6930.

Information: Mario Bernadel, (201) 489-8492 (mbernad@ieee.org) or Vivek Shaiva, (908) 229-6125, (vshaiva@computer.org).

NJ Section PACE:

Engineers Meet: Legislative Action - Off-Shoring NJ Jobs

On Wednesday, August 13th, the North Jersey Section Professional Activities Committee will meet to discuss Legislative Action involving the Off-Shoring of NJ State jobs. The NJ State Senate and Assembly will convene in September to consider S1349 and A2425. As the job situation for members of the engineering community worsens this will prepare us to present and discuss our concerns.

You do not have to be unemployed to attend. All jobs are being threatened. You are encouraged to attend and bring your spouse and associates.

About the Meeting:

This meeting provides an opportunity to meet and discuss the unemployment situation. High on the IEEE-USA list of subjects is unemployment and the displacement of American citizens by

sending jobs offshore and importing foreign workers under the H-1B and L1 legislation. Now the New Jersey State Senate and Assembly have introduced legislation affecting New Jersey jobs.

This year one IEEE-USA goal is to roll the H-1B number back to 65,000. And, please do not confuse this as an "immigration" issue. This is all about money and wage busting.

We need input and views from the unemployed on this important issue. It would also be helpful if you confirm your attendance via e-mail or telephone.

Our PACE meeting is open to discuss professional needs. PACE provides the opportunity to meet, address, discuss and perhaps improve the professional aspects of the engineering profession. We should take advantage of the opportunity to have a place and time to meet. Invite your associates to join us. Bring engineers and students from the other engineering disciplines

According to IEEE-USA leaders "Employment Assistance and Career Development are important" and they request your help. More on these projects can be found at www.ieeeusa.org

"Today's Immigrant - Tomorrow's Victim" see www.aea.org.

Welcome!

You do not have to be a member of the IEEE to attend. Members and students from other professional societies and engineering disciplines are always welcome.

Time: 6:30 to 8:30 PM, Wednesday, August 13, 2003.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

Information: Paul Ward, (973) 790-1625. PWard1130@aol.com, Richard F. Tax, (201) 664-6954, rtax@bellatlantic.net.

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IEEE NJ SECTION HOME PAGE

<http://web.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://web.njit.edu/~ieeenj/NEWSLETTER.html>

REPORT ADDRESS CHANGES TO:

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Dr. Richard Snyder (r.snyder@ieee.org)

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Dr. Sanghoon Shin at (973) 492-1207 Ext. 22, s.shin@ieee.org.

PACE NEWS

By Richard F Tax

Unemployment Legislative Alert: NJ State Senate

IEEE-USA is inviting you to write, FAX and/or call your Representatives at the New Jersey State and local level. This is another important step in enhancing the job market for engineers. www.ieeeusa.org.

With your much needed help we will be more successful in informing your representatives.

NJ Senator Shirley Turner is requesting your assistance regarding Bill S1349. S1349 provides that only citizens or legal residents of the United States may be employed in performing certain State contracts. S1349 and its Assembly version, A2425, are being considered by the Assembly State Government Committee.

This bill is in trouble because of special interest groups that are mobilizing to oppose the bill. These groups have suggested certain amendments that would "gut" the bill.

We do not want this legislation watered down to defeat the purpose of keeping US jobs, especially those of the public sector, in the hands of US citizens.

Entire list of your NJ representatives and Legislation A1349 & A2425

http://www.njleg.state.nj.us/members/abcr_oster.asp

Here's a handy map to find your local NJ rep

http://www.njleg.state.nj.us/districts/njmap_210.html

The State Government Committee is:

- ✉ Assemblyman Alfred Steele:
AsmSteele@njleg.org, 973-247-1555
- ✉ Assemblyman Mims Hackett:
AsmHackett@njleg.org, 973-762-1886
- ✉ Assemblyman Nicholas Asselta:
AsmAsselta@njleg.org, 856-691-3004
- ✉ Assemblywoman Linda Greenstein:
AswGreenstein@njleg.org, 609-395-9911
- ✉ Assemblyman George Geist:
AsmGeist@njleg.org, 856-309-2200
- ✉ Assemblyman Albio Sires, Speaker of the Assembly:
AsmSires@njleg.org, 201-854-0900
- ✉ Majority Leader, Assemblyman Joe Roberts: AsmRoberts@njleg.org, 856-742-7600

Call and Email these representatives.

Be sure to CALL and email! Calling will be more effective in the emotional and importance of the message. Also, stay focused on off shoring.

Leave an impression on this issue. Call back if you have other issues.

You might want to mention that according to your source www.nomoreh1b.com more than 220,000 New Jersey workers are unemployed while more than 140,000 foreign workers are employed in NJ under the H-1B legislation.

Please, CALL STAR LEDGER, Main office: 973-392-4141 & ask for coverage on S1349, A2425. www.starledger.com

Check out www.techsunitite.org for more on New Jersey.

How is the employment situation affecting you? How is outsourcing affecting you?

REMEMBER: the job you save may be your own. We have 4500 members in North Jersey. Make it work.

For more information attend our PACE meetings. See meeting notice in this issue.

NJ Consultants' Network:

Professional Engineer Licensing

Mr. Elliot Shapiro of Shapiro Engineering will discuss issues related to Professional Engineer licensing at the September 25th meeting of IEEE Consultants' Network of Northern NJ.

About the Talk

While effectively a must in civil or mechanical engineering disciplines, PE licensing appears to be not very common among those active in electrical, electronic and software design. This could be driven both by tradition and by the "industrial exemption" of our clients.

And yet, licensing as a professional Engineer can bring many benefits to the independent practitioner. Aside of the obvious – the ability to call oneself an engineer and the business "engineering" – a license can open new doors and encourage new clients.

Particularly, governmental entities typically require licensing regardless of scope and type of work. Those pursuing expert witnessing can convey extra credibility. Even securing professional insurance may be less expensive.

The presentation will describe potential benefits of licensing and the process of obtaining a state license.

About the Speaker

Elliot J. Shapiro, PE, is the principal of Shapiro Engineering of Valley Stream, NY. He utilizes a mechanical engineering background in operation of his environmental engineering business, specializing in waste handling and treatment and in industrial pollution issues. Shapiro Engineering is accredited by NY State as a commercial laboratory, offering analytical services. Mr. Shapiro is a member of the World Trade Center Building Code Task Force, which reviews

and upgrades regulations pertaining to high-rise buildings, such as events and conditions for which buildings should be designed, fire protection and evacuation. He can be contacted at (516) 791-2300.

About the Consultants' Network

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and promotes the use of independent technical consultants by business and industry.

All Welcome!

You do not have to be a member of the IEEE or of the Consultants' Network to attend. Admission is free.

Time: 7:30 PM, Thursday, September 25th, 2003.

Place: MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. (Entrance at rear of building)

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org. To download a map to KDI, go to: <http://www.mcekd-integrated.com/directions.htm>.

Conference Rooms Needed!

The North Jersey Section (Education Committee) is looking for conference room facilities to hold their training seminars. The seminars are being held on one weeknight from 6:30 PM to 9:00 PM. In lieu of providing the conference facility for free, the organization can get free registration up to three members in the course/seminar. Please contact Bhanu Chivakula, Co-chair, Education Committee at b.chivakula@computer.org for suggestions or discussions, if interested.

Update Your Membership Profile

If you've recently updated your address, email or phone number, you can quickly update your member profile on the web at <http://www.ieee.org/coa>, or send an email to address-changes@ieee.org. Accurate contact information ensures prompt delivery of meeting announcements, activities and newsletters.



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www.TechnologyOnTap.org

IEEE North Jersey Section Activities August 2003

Aug. 6 – “NJ Section Executive Committee Meeting” - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Dr. Sanghoon Shin at (973) 492-1207 Ext. 22 or s.shin@ieee.org.

Aug. 10-13 – “ITRE 2003 - IEEE International Conference on Information Technology: Research and Education” - Newark, NJ. For further information see <http://web.njit.edu/itre2003> or email itre2003@njit.edu.

Aug. 13 – “Symposium on Security in e-business: Opportunities, Technical Issues and Implementation” - IEEE New Jersey Coast, PACE and Consultants Network, 9:00 AM – 5:00 PM, Meeting Rooms 107/108, Magill Commons, Monmouth University, NJ. Dr. Amruthur Narasimhan, (anarasimhan@ieee.org), (732) 957 0850. For more details and registration, see <http://mywebpages.comcast.net/anarasimhan3/seminar/seminar.htm>.

Aug. 13 – “Engineers Meet: Legislative Action - Off-Shoring NJ Jobs” - NJ PACE, 6:30 – 8:30 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward (973) 790-1625 (PWard1130@aol.com) or Richard F. Tax (201) 664-6954 (rtax@bellatlantic.net).

Aug. 21 – “Home Networking and Setting up a Low-Cost Personal/Business Web Site” - NJ Computer Chapter, 7:00 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Mario Bernadel (201) 489-8492 (mbernadell@ieee.org) or Vivek Shaiva, (908) 229-6125, (vshaiva@computer.org).

Upcoming Meetings

Sept. 3 – “NJ Section Executive Committee Meeting” - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Dr. Sanghoon Shin at (973) 492-1207 Ext. 22 or s.shin@ieee.org.

Sept. 17 – “Advanced JAVA Programming” - North Jersey Section, Wednesday Evenings, 10 sessions, 6:30-9:00 PM, Ramada Inn, 265 Route 3 East, Clifton, NJ. Bhanu Chivakula (b.chivakula@computer.org).

Sept. 18 – “Energy Pricing NJ” - NJ IAS/PES Chapters, 7:00PM, PSE&G Training Center, Edison, NJ. Ken Oexle (973) 386-1156.

Sept. 25 - “Professional Engineer Licensing” - NJ Consultants' Network, 7:30 PM, MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Oct. 17-18 – “Call for Participation - Consortium for Computing Sciences in College - Eastern Region - Nineteenth Annual Conference” - Montclair State University, Upper Montclair, NJ. For further information see <http://www.csam.montclair.edu/~deremer/CCSCE2003Call.pdf> or <http://www.ccsc.org>.

Oct. 24 – “Power Systems Grounding Technical Seminar” - Sponsored by the NJ IAS/PES Chapters, 9:00 AM to 3:00 PM, JCP&L, 300 Madison Avenue, Punchbowl Room, Morristown, NJ. Contact Ronald W. Quade at (212) 833-0268 or RonaldWQuade@eaton.com.

Jan. 5-8 – “2004 IEEE Consumer Communications and Networking Conference - Consumer Networking: Closing the Digital Divide” - Caesars Palace, Las Vegas, Nevada. See <http://www.ccnc2004.org/> for more details.

**Members and Non-Members Welcome
PLEASE POST**

Competing with the \$800 a Month (or less) Engineer

By Paul Kostek

We hear plenty about the positive impact globalization is having on the marketplace. Unfortunately for many engineers and other high-tech professionals, the impact has been devastating.

Engineering jobs in all sectors of the economy are being contracted out and moved outside the United States at an alarming rate. By 2015, 3.3 million white-collar jobs - including more than 472,000 in information technology and mathematics - are expected to move to low-cost countries, according to Forrester Research Inc. analyst John C. McCarthy. The predicted loss in wages is a staggering \$136 billion. The loss to the US economy is far greater.

To take advantage of much lower salaries in other parts of the world, major corporations are already building overseas design centers. For the CEO under pressure to improve the corporate bottom line, the economics are hard to beat. You can hire a skilled non-US engineer for about \$800 a month, about what many US engineering grads earn per week. The \$5,000-a-year software programmer is another global reality.

Business Week magazine recently reported that for \$650 a month you can employ an aerospace engineer in Russia with a master's degree in math aeronautics. His US counterpart makes about \$6,000 a month.

So how do US engineers compete in this new global marketplace? The answer has profound implications for the future of technical innovation in the United States, which sustains our nation's economic competitiveness, national security and overall standard of living.

Obviously US engineers won't be able to compete on price by accepting salaries that are below US poverty levels, leaving superior skills and proximity as their best hopes for maintaining a competitive edge. But even if the US engineer enjoys a skills edge, how can an employer not take advantage of the increased productivity inherent in a salary differential that allows hiring 5-10 engineers overseas for the price of one here?

Is it an advantage for engineering functions to be performed close to the company site or in the same time zone? Many argue that companies prefer to keep their engineering design jobs close at hand in order to safeguard the company's intellectual property. But the offshore outsourcing trend clearly encompasses engineering design services. And what is proximate to the large global or virtual corporation that

engages in 24-hour-a-day operations by moving work from time zone to time zone?

While jobs are being sent overseas, news on the home front is also discouraging. The unemployment rate for electrical engineers rose to an unprecedented 7.0% in the first quarter of 2003, according to the US Department of Labor, Bureau of Labor Statistics, and stood at 6.4% for the second quarter. The most recent report also showed a 7.5% unemployment rate for computer programmers, 5.7% for computer hardware engineers and 5.6% for computer scientists and systems analysts. The rate for all workers was 5.6%.

Despite this record-high engineering unemployment, industry continues to defend increased outsourcing and the use of guest labor (such as H-1B and L-1 visa workers) by arguing that not enough US students are entering engineering programs or pursuing technical careers. Government is starting to join the chorus as the large Cold War generation of government engineers reaches retirement age. But if all an engineering career can promise is job insecurity and low pay on one hand, or red tape and a government salary on the other, why would America's best and brightest choose engineering as a career path?

Lacking a clear edge in price, skills or proximity, what is the future for US engineers? Do we just need to abandon certain areas and fields of engineering in the same way that the US said good-bye to textiles and steel in the name of free trade?

Will job opportunities be limited to government-related work or infrastructure-related industries such as electric power generation and transmission, or phone service where US citizenship or proximity is imperative?

As an engineer who has had to reinvent myself a dozen times during a 24-year career in order to stay competitive, I have to ask myself if an overseas competitor in Belarus, Beijing or Bangalore possesses the same skills that I do, and if proximity isn't important, and if they'll work for \$800 a month, then why hire me at \$8,000 a month? It's a question that is increasingly hard to answer. For the next generation considering a career in engineering, it will be even harder.

Paul Kostek is the 2003 Chair of the American Association of Engineering Societies and a past president of The Institute of Electrical and Electronics Engineers, USA (IEEE-USA). The views expressed here are his own.

H-1B and L-1 Visas Accelerate Offshore Outsourcing

By Chris McManes

The presence of guest workers in the United States on H-1B and L-1 visas has accelerated the offshore outsourcing of high-tech work and jobs, said Dr. Ron Hira, Chair of the IEEE-USA Research and Development Policy Committee in June testimony before the House Committee on Small Business.

The trend has increased the "movement of work offshore as temporary workers in management positions outsource work to overseas colleagues, and as temporary workers who have returned home use their knowledge and connections in the U.S. market to competitively bid for outsourced work," Hira said.

"A policy shift away from reliance on guest workers and toward permanent immigration would help minimize this problem."

The hearing, chaired by Rep. Donald Manzullo (R-Ill.) and televised on C-SPAN, was held 18 June to help answer the question, "The Globalization of White-collar Jobs: Can America Lose these Jobs and Still Prosper?"

In a widely cited Forrester Research analysis, at least 3.3 million white-collar jobs and \$136 billion in wages are expected to shift overseas by 2015. Lower labor cost is the principal reason. A comparison done by the World Bank showed that a \$70,000 salary for a U.S. engineer has the same purchasing power as a \$13,580 salary for an Indian engineer or a \$25,690 salary for a Hungarian engineer.

"Global competition accelerates creative destruction, which can be good for innovative and market-based economies overall, but terribly difficult for displaced communities and individuals," said Bruce Mehlman, assistant secretary for technology policy, U.S. Department of Commerce. "America must never compete in the battle to see who can pay their workers the least, and it will take sustained innovation to ensure we don't have to."

Testimony also included discussion of the H-1B and L-1 temporary visa programs.

L-1 visas, which have no annual limit, are designed to facilitate the transfer of multinational corporate executives and experts into the United States. H-1B visas are available to foreign workers entering the country to perform work in a specialty occupation, i.e. one requiring a theoretical application of a highly specialized body of knowledge and a bachelor's degree or equivalent.

Rep. Nancy Johnson (R-Conn.) told the committee about meeting with constituents, all unemployed information technology workers, who spoke of being replaced by cheaper, foreign workers on H-1B and L-1 visas.

"In some cases, the American worker was instructed to train the new arrival only to be summarily dismissed and replaced by the foreign worker," Johnson said. "If this is true, it directly contradicts the intention and spirit of our immigration laws."

The annual H-1B visa cap of 195,000 will drop back to its historical level of 65,000 on 1 Oct. without further congressional action. IEEE-USA, in a position statement adopted in February, supports returning the cap to 65,000, and using the employer-paid visa fees to increase the availability and effectiveness of skills training for displaced U.S. high-tech professionals. The position statement is available at http://www.ieeeusa.org/forum/POSITION_S/h1b.html.

"Congress should see to it that more of the H-1B fee revenue is used to address the specialized instructional needs of unemployed engineers, scientists and other high-tech professionals," IEEE-USA President-Elect John Steadman said. "In the long term, it should focus support on programs that help financially needy students complete degrees in computer science, engineering and mathematics."

The H-1B visa cap was increased in 1999 because of purported shortages of U.S. high-tech workers during the dot-com boom and in preparation for Y2K.

"If that was true and the shortage no longer exists, then the justification for the inflated number of H-1B visa holders is moot," Rep. Johnson said. "We have no public interest in keeping qualified American workers unemployed in order to accommodate guest workers."

Since 2001, unemployment among US high-tech professional has increased to unprecedented levels. The US Department of Labor, Bureau of Labor Statistics reported that in the first quarter of this year, joblessness among electrical and electronic engineers was 7.0%. Computer software engineers were unemployed at a rate of 7.5%, while the rate for computer hardware engineers was 6.5%.

"IEEE-USA is concerned that these increases in engineering unemployment may not be a short-term, cyclical phenomenon that will correct itself when the economy begins its long anticipated upturn," Hira said. "Instead, current engineering unemployment is the result of much more fundamental structural changes in the U.S. economy that could have very serious, long-term effects ..."

Hira, also a member of the IEEE-USA

Career and Workforce Policy Committee, is a postdoctoral fellow at Columbia University's Center for Science, Policy and Outcomes in Washington. His entire written testimony is available at <http://www.ieeeusa.org/forum/POLICY/2003/061803.html>.

EE Unemployment Rate Drops Slightly Still Ranks Above Other Professionals

Washington (11 July 2003) - The unemployment rate for US electrical and electronics engineers (EEs) dropped in the second quarter, but remains well above the rate for other high-tech professionals, according to data compiled by the Department of Labor, Bureau of Labor Statistics (BLS).

After climbing to an unprecedented 7.0% in the first quarter, the EE jobless rate fell to 6.4%, still more than twice the rate for all managers and professionals (3.1). Mechanical engineers were unemployed at a rate at 3.1%, civil engineers at 3.9% and industrial engineers at 5.9%.

"The data suggests the EE unemployment rate went down because new jobs were added, not because of a reduction in the unemployed EE population," IEEE-USA President-Elect John Steadman said. "Just who these new jobs are going to is not clear, although we're concerned that many of them are being filled by temporary guest workers."

The BLS report showed that 17,000 more EEs were employed in the second quarter vs. the first (386,000 vs. 369,000), but that the number of jobless EEs held steady at 28,000. At 6.4% EE joblessness, the rate is more than six times as high as it was in 1997 (1.0), and more than four times as great as 2000 (1.2).

The second-quarter unemployment rate for all workers was 5.6%. The number of US workers claiming jobless benefits in late June reached its highest point since February 1983, the Labor Department said.

While the jobless rate fell from 7.5% to 4.1% for computer software engineers and from 6.5% to 5.7% for computer hardware engineers, it rose from 6.7% to 7.5% for computer programmers. Computer scientists and systems analysts also saw an increase in unemployment from 4.9% to 5.6%. Despite the percentage drop for computer software engineers, 36,000 jobs were lost in that occupational category.

IEEE-USA Supports Reverse Engineering in Brief before U.S. Supreme Court

Washington (4 June 2003) - IEEE-USA filed an amicus curiae brief Monday before the US Supreme Court in support of reverse engineering in the Baystate Technologies, Inc., vs. Howard L. Bowers (No. 02-1585) copyright case.

In its brief, IEEE-USA stated that the Federal Circuit's decision in *Bowers vs. Baystate Technologies, Inc.*, 320 F.3d 1317 (Fed. Cir. 2003) "creates substantial uncertainty as to whether copyright holders can unilaterally prohibit the long-standing, widely accepted and essential practice of reverse engineering." The brief asks the Court to review the lower court decision in that light.

Glenn Tenney, chair of the IEEE-USA Intellectual Property Committee (IPC), said the protection of reverse engineering is of great importance.

"The US economy and our competitiveness internationally hinges upon the careful and closely negotiated balance that Congress built into federal intellectual property law," Tenney said. "It would be dangerous to allow software publishers to repeal the Copyright Act with a shrink wrap, simply because they don't like that balance. We sincerely hope that the Court will take up this important case."

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." (IEEE-USA 1997 Position Statement: <http://www.ieeeusa.org/forum/positions/reverse.html>).

According to the IEEE-USA brief, "many persons engage in reverse engineering to gain ideas about how to create competitive or complementary products."

A copy of the brief, which was coordinated by IEEE-USA's IPC, and other relevant resources are available at <http://www.ieeeusa.org/forum/policy/2003/Baystate060203.html>.

Andrew Greenberg and Matthew Conigliaro of Carlton Fields, P.A. of Tampa (www.carltonfields.com), prepared the brief pro bono for IEEE-USA, which was joined by the American Library Association, American Association of Law Libraries, and the Association of Research Libraries. Jonathan Band of Morrison & Foerster, LLP of Washington, DC, (<http://www.mofo.com/index.cfm>), represented the library associations.

2003 Awards Reception - May 4, 2003



Photo taken by Anne Giedlinski

Carol and John Baka share conversation with Dick Snyder



Photo taken by Anne Giedlinski

Roland Dixon, PES Chapter Representative Region 1, presents Outstanding Engineer Plaque to Tom Piascik. Also Virginia Sulzberger, PES Division VII IEEE Director, and Ken Oexle, PES Chapter Officer



Durga Misra, North Jersey Section Chair, introduces Dr. Alfred Aho, recipient of the John von Neumann Medal

Photo taken by Anne Giedlinski

Ken Oexle, Section Awards Chair, joins Kirit Dixit, IEEE Region 1 Award Recipient



Photo taken by Anne Giedlinski



Mengchu Zhou (2nd from left), new IEEE Fellow, with friends and colleagues

Photo taken by Anne Giedlinski

Symposium on Security in e-business: Opportunities, Technical Issues and Implementation

by
Dr. Manu Malek
Director of CyberSecurity Certificate Program at Stevens Institute of Technology
&
Dr. Amruthur Narasimhan
President, Amrutek Services Inc.

Sponsored by IEEE New Jersey Coast & PACE & Consultants Network

Date & Time: August 13, 2003; 9 AM to 5 PM; Breakfast starts at 8:30 AM

VENUE: Meeting Rooms 107/108 Magill Commons, Monmouth University,
West Long Branch, NJ

Low fees for registration covering meals and presentation material.
Lower fees for early registration,
IEEE member discount & Student discounts available.

For more detailed information and registration, please go to

<http://mywebpages.comcast.net/anarasimhan3/seminar/seminar.htm>

For other questions, contact

Dr. Amruthur Narasimhan
President, Amrutek Services Inc,
Consultant VOIP, WLAN, e-Business, Project Management
(732) 957 0850
anarasimhan@ieee.org

NJ PES/IAS:

Power Systems Grounding Technical Seminar

The PES and IAS Chapters will sponsor a one-day seminar covering Power Systems Grounding. The session will be held on Friday, October 24th at JCP&L, 300 Madison Avenue, Punchbowl Room, Morristown, NJ 07962.

About the Seminar

The instructor will be David Shipp, P.E., Product Line Manager and Principal Engineer for Cutler-Hammer Engineering Services and Systems Division. Dave has over 31 years of experience, is an IEEE Fellow and a member of the Society of Petroleum Engineers. He has published several papers for IEEE and EC&M Magazines. Dave is an active member of several of the IEEE working groups that publish the IEEE Color Book Series. Dave has recently published many papers on the topic of electrical submersible pumps for the Society of Petroleum Engineers as well.

Power System grounding is the most misunderstood aspect of power system design. This technical seminar will cover the characteristics of different power system grounding techniques, industry practices, NEC requirements, Ground Fault Protection and Detection, special generator grounding requirements, switchgear ground fault testing requirements, Electronic Grounding, Ground mats, etc.

The key points to be covered are:

1. Characteristics of Different Power System Grounding Techniques
2. Types of System Grounding
3. NEMA/Arcing Ground Faults
4. NEC Article 250 -- Grounding
5. NEC Article 230-95 -- Ground Fault Protection
6. Performance Testing -- (Switchgear GFP)
7. Electronic Grounding
8. System Ground Fault Protection Modifications
9. Ground Mats/Bonding

The registration fee for this seminar prior to October 10th will be \$150 (non-IEEE members), \$100 (IEEE Members), and \$50 (students with valid ID). The fee will be waived for IEEE Life Member Grades with verification at the seminar. Registrations after October 10th must include an additional late fee of \$25. The seminar fee includes lunch, refreshments and handouts. Non-members joining IEEE within 30 days of the seminar will be rebated 50% of the IEEE registration charge.

Time: 9:00 AM to 3:00 PM, Friday, October 24, 2003.

Place: JCP&L, 300 Madison Avenue, Punchbowl Room, Morristown, NJ.

Directions: Route 287 to Route 124 Exit in Morristown. Follow signs toward Madison, JCP&L is about 1.5 miles on the left side.

Information: Ronald W. Quade, PE, (212) 833-0268 or RonaldWQuade@eaton.com.

Registration: Power Systems Ground Technical Seminar 10/24/2003

Register via US mail to: Ronald W. Quade, PE
Eaton Cutler-Hammer
830 Third Avenue
Suite 920
New York, NY 10022

Name _____

Address _____

Phone _____ Email _____

IEEE # _____ Student @ _____ Non IEEE _____ Life Member _____

Payment Enclosed \$ _____ Add \$25 late registration after October 10th

Make Check payable to North Jersey Section IEEE



ITRE 2003

International Conference on Information Technology: Research and Education

Research and Education on IT for enabling the next generation technology development

August 10-13, 2003, Newark, New Jersey, USA

Sponsored by
New Jersey Commission on Higher Education, IEEE North Jersey Section and COMSOC Chapter, and Technical co-sponsorship with IEEE Communications Society

Call for Participation

Information Technology (IT) plays a vital role in today's global economy. Besides its phenomenal impact on financial and industrial sectors in the past decade, Information Technology is also rapidly changing the landscape of research and education. Research in advanced telecommunications, networking and computing, calls for innovative data representation tools, high-speed simulation platforms, and analytical instrumentation with which to explore and enhance both experimental and existing methodologies. Education is changing with the advent of new interactive on-line learning technologies, multimedia electronic libraries and collaborative workspaces, improving knowledge sharing and education practices.

ITRE2003 invites your participation for the first international conference dedicated to Information Technology with specific focuses on its applications in research and education. The mission of ITRE2003 is to provide a forum for IT professionals, theoretical researchers, and practical educators in which to share insights and experiences of the current state-of-the-art information technologies, pedagogy and academic-industry collaborations, and to contribute to a vision of the future of IT that will shape the emerging high-tech workforce. Topics include:

- **Research/Education Methodology –**
 - Simulation tool design and implementation
 - On-line analytical processing (OLAP)
 - Fast prototyping, modeling and optimization
- **Information Networking –**
 - Network management and performance
 - Quality of service in networks
 - Information and network security
 - Wireless communications systems
 - Intranet technology
- **Systems and Applications –**
 - Tutoring and learning systems
 - Collaborative systems
- **Multimedia Technology –**
 - Multimedia sever and proxy design
 - Real-time multimedia signal processing
 - Multimedia indexing and retrieval
 - Multimedia application system infrastructure
- **Human-Computer Interface –**
 - Human computer interaction
 - Virtual reality
 - Machine vision systems
 - Interactive video conferencing
- **Information Management –**
 - Data mining and knowledge systems
 - Artificial Intelligence
 - Parallel computing

A Student Best Paper will be selected and awarded at the conference. For the advanced program, registration, and further information, please visit: <http://web.njit.edu/itre2003>.

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Nirwan Ansari, NJIT

Technical Program Chairs

Fadi Deek, NJIT

Ching-Yung Lin, IBM Watson

Heather Yu, Panasonic

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Haniph Latchman, Univ. of Florida

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**International Conference on Information Technology: Research and Education
Conference Registration Form**

August 10-13, 2003, Newark, New Jersey, USA

Last Name: _____ First Name and MI: _____

Name for Badge: _____

Affiliation: _____ Department: _____

Street Address: _____

City: _____ State: _____ ZIP/Postal Code: _____ Country: _____

Phone: _____ Fax: _____ Email: _____

	Conference Registration	IEEE Member	Non-Member	Student
(Check one) before June 1	<input type="checkbox"/> \$300	<input type="checkbox"/> \$350	<input type="checkbox"/> \$100	
(Check one) after June 1	<input type="checkbox"/> \$375	<input type="checkbox"/> \$425	<input type="checkbox"/> \$150	

For registration as an IEEE member, please include the membership number: _____

There will be an extra page charge of \$100 per page for papers exceeding 5 pages.

Summary of Payment:

Conference Registration	\$ _____
Extra Page Charge (# _____ @ \$100.00)	\$ _____
Extra Banquet Ticket (# _____ @ \$60.00)	\$ _____
Extra Reception Ticket (# _____ @ \$60.00)	\$ _____
Extra Lunch Ticket (# _____ @ \$12.00)	\$ _____
Extra Breakfast Ticket (# _____ @ \$7.00)	\$ _____
Total amount Due:	\$ _____

Please mail/fax payment and this one-page form to:

Dr. Edwin Hou, ITRE 2003 Registration Chair
Department of Electrical & Computer Eng.
New Jersey Institute of Technology
Newark, NJ 07102, U.S.A.
Tel: 973-596-3521; Fax: 732-968-7841
Email: hou@njit.edu

- Check or money order in U.S. currency with a U.S. banking system routing number, payable to **ITRE2003@NJIT**.
- Charge the total amount to: (check one) Visa Mastercard Discover

Card Holder Name: _____

Billing Address (required): _____

Card Number: _____ Expiration Date: _____ Signature: _____

For all authors:

Paper no. _____ Paper Accepted

Paper title: _____

Author(s): _____

Important: At least one author of each accepted paper, invited paper, and accepted technical demo (including those in all tracks, workshop and special sessions) must register with Full Registration (NOT student) on or before May 15, 2003 to have your paper included in the conference proceedings. Please send/fax the copyright forms along with this registration form.

Cancellation prior to June 15, 2003 will incur a \$100.00 administrative fee. No refund will be issued after June 15, 2003.

IEEE North Jersey Section Seminar Advanced Java Programming

*Wednesday Evenings, September 17, 2003 through November 19, 2003 - ten weekly classes
(September 17, 24, October 1, 8, 15, 22, 29, November 5, 12, 19, 2003)
Ramada Inn, 265 Route 3 East, Clifton, NJ (Checks should not be mailed to this address)*

The North Jersey Section IEEE is offering an evening course entitled "Advanced Java Programming." About 2.5 million Java Programmers are currently working on all types of commercial projects in the world, ranging from cell phone applets, to UNIX server, to mainframe data-warehouse access. This course covers various server side programming techniques. The prerequisite for this course is that attendees should know fundamentals of Java or have completed an Introduction to Java Programming seminar.

Instructor: Donald Hsu, PhD, has been a corporate manager for 11 years and is an experienced trainer. Since 1997, he trained 300+ people in Java Programming and Advanced Java Programming courses in seven organizations.

TOPICS

1. Explain the concept of Multithreading and Collections
2. Distinguish different types of Java Servlets and Networks
3. Define the use of Java Database Connectivity and Remote Method Invocation
4. Identify the details of Advanced Swing and Advanced AWT
5. Construct Enterprise Java Beans and Cold Fusion
6. Analyze Firewall Security and Internationalization issues
7. Contrast ASP vs. JSP, Corba vs. Dcom, Jini, Soap, J2ME
8. Build XML and advanced Multi-tier Web Servers
9. Employ Sun One Studio, IBM WebSphere, Beas WebLogic
10. Complete Server projects using development tools
11. Present real-world Server projects

Class size will be limited to a maximum of 25 with a minimum of 15. Early registration is recommended. Phone reservations will NOT be accepted. Reservations accepted after September 1, 2003 will require a late fee of \$25. No reservations will be accepted after September 6, 2003.

WHERE: Ramada Inn, 265 Route 3 East, Clifton, NJ. (Checks **should not** be mailed to this address)

WHEN: 10 Sessions, Wednesdays, September 17, 24, October 1, 8, 15, 22, 29, November 5, 12, 19, 2003, 6:30-9:00 PM.

COST: With textbook or notes: IEEE (& affiliate) members \$350; Non-IEEE members \$450.

CONTACT: Bhanu Chivakula -email b.chivakula@computer.org

REGISTRATION: Advanced Java Programming

Register and send checks via U.S. mail to: Bhanu Chivakula
19 Prestwick Way
Edison NJ 08820

Name: / Mr. / Mrs. / Miss / Ms. / _____

Non-member

email address

IEEE /Associate Member #: _____ Member of _____ technical society

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

Please enclose required fee payable to: **North Jersey Section IEEE**

Registration status will be mailed after September 6, 2003. Phone inquiries concerning registration will NOT be honored. In general, the effective date of the application corresponds to the date when BOTH a fully completed application/registration and payment are received.

Tuition receipt will be mailed only if this box is checked

Signature: _____