



The IEEE

Newsletter

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

The IEEE Fall 1998 Professional Skills Development Workshop

This notice is to announce the IEEE Fall 1998 Professional Skills Development Workshop. The focus of this mini-conference will be professional activities and skills needed by new engineers. Most graduating students do not have the necessary training to be effective engineers in the modern and dynamic workplace of the 90's. Attending this workshop is the single best way to learn those skills. Being aware of what is expected of you, gives you an edge during the next job interview, makes you more competitive for shrinking bonus dollars, and helps jumpstart you into a healthy career with a solid foundation.

- This workshop is FREE !!
- Open to ALL students of ALL majors from local schools.
- Free lunch and refreshments provided.
- If interested in attending, email a.j.patel@ieee.org.

The workshop will be composed of speakers giving seminars and conducting short activities. All slides will be made available to attendees for free. The agenda includes the following topics:

- Career Development
- Career Planning
- Professional Presenting/Speaking
- Leadership Building Skills
- IEEE after the student branch - Professional and Technical
- and more

All this information is available at the North New Jersey Section Student Activities Committee Homepage at: <http://menger.eecs.stevens-tech.edu/~apatel3/ieee.html>. Directions to get to Stevens by car/train/bus, a flyer to post around campus, and details of speakers and their talks is available at the above site.

If you would like all this information emailed to you directly, as well as any updates about the workshop, send email to Amit Patel, workshop organizer, at: a.j.patel@ieee.org with "workshop" in the subject line (without quotes), or call 973-284-2708.

Time: 10:00 AM – 4:00 PM, Saturday, November 7, 1998.

Place: Burchard Building Main Auditorium, Stevens Institute of Technology, Hoboken, NJ.

Information: Amit Patel (973) 284-2708, a.j.patel@ieee.org.

NJ PES/IAS:

New Jersey Performing Art Center Tour

The IAS/PES Chapters will sponsor a tour of the New Jersey Performing Art Center on November 14, 1998.

Opened in October 1997, the NJPAC attracted over a half a million theatergoers in its inaugural season. It has been described as "a gem" and "a star", with the likes of the Lincoln center or the Kennedy Center.

Admission to the tour is by **advanced registration only**. Send a stamped self-addressed legal envelope to

Ken Oexle
11 Deerfield Rd
Whippany, NJ 07981

for passes, directions, parking, point of assembly and other information. We are limited in the number of people they can accommodate.

Time: 10:00 AM, Saturday, November 14, 1998. Advanced registration only.

Place: NJ Performing Art Center, Newark, NJ.

Information: Ken Oexle (973) 386-1156.

NJ Section GOLD/PACE:

Anheuser-Busch Newark Plant Tour!

A jointly sponsored GOLD/PACE event is scheduled you won't want to miss! IEEE student members and members will be treated to a behind-the-scenes electrical and control system tour. We will get an insiders' look at their process and batch control systems, including PLC's as well as control and information networks and systems.

IEEE has arranged, for the convenience of our host, to transport attendees via charter bus so that we will arrive together. The bus will leave the Willowbrook area at 4:15 sharp, with a possible pickup site in Clifton. A boxed lunch/dinner will be served on the bus as we travel to Newark, consisting of sandwich, fruit, snack, and drink. A modest fee of \$5 will be charged to defray food costs. All this and the chance to network with fascinating fellow members!

Interested? Inquiries will be handled electronically. If you wish further information, contact North Jersey PACE Chairman Rodney Cole via email at rod-tonya-cole@worldnet.att.net.

The number of attendees is strictly limited to 35 people, and reservations will not be accepted after November 6.

Time: 4:15 PM sharp, Tuesday, November 17, 1998.

Place: Bus leaves from Willowbrook area, Wayne, NJ.

Information: Rodney Cole, rod-tonya-cole@worldnet.att.net.

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Business Manager..... Keith Saracinello

Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at k.saracinello@ieee.org or to *The IEEE Newsletter*, c/o Keith Saracinello, 96 Everett Rd, Parsippany, NJ 07054-3164, (973) 515-8829.

IEEE NJ SECTION HOME PAGE

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

IEEE NJ SECTION NEWSLETTER HOME PAGE

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

REPORT ADDRESS CHANGES TO:

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

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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 call Secretary Keith Saracinello (973) 515-8829.

What Courses Would You Like to See?

The IEEE North Jersey Section is very interested in getting your feedback on what courses you would like us to offer. Here is a list of potential courses we can offer.

1. Introduction to Wireless
2. RF/MMW Wireless System Engineering
3. Practical System and RF Components Measurements
4. Principle of Digital and Analog Wireless Communication
5. Data Communication
6. DSP
7. RF Basics
8. RF Advanced
9. RADARS
10. Control Systems
11. Engineering Math-refresh Course
12. Microwave/MMW Design
13. Multi-layer Board Layout and Pitfalls to Avoid (RF, Analog, Digital and Mix Signal Application)
14. Effective Project Management for Engineers
15. Resume Writing Workshop for Electrical Engineers
16. HAM Radio
17. Analog Electronics Practical Approach – Things they don't teach you in college
18. Digital Electronics Practical approach – Things they don't teach you in college
19. Practical Antenna Theory and Design
20. Technical Documentation Writing
21. Design for Testability
22. Digital/Analog Circuit Troubleshooting
23. Understanding and Troubleshooting Today's Advanced Personal Computers
24. Becoming Proficient Using Front Page
25. Development and Use of Visual Basic Macros for Office 97 Applications
26. Understanding Failure Modes of Active and Passive Components in a COTS Environment and Developing Acceptable Reliability Predictions Therefrom).
27. Web Page Design
28. Short Circuit Analysis
29. Power Quality
30. Electrical Engineering Project Management in a Deregulated Utility Industry?
31. Introduction to HTML
32. Basic Internet Theory
33. Introduction to PLC (Programmable Logic Controllers)
34. Applied Statistics for Engineers &

Scientists

35. Test Equipment, The Theory and Use
36. List Other(s) _____

Please provide us your feedback either via email to silberman@ieee.org or US mail to:

Gabe Silberman
57 Sandford Rd
Fair Lawn, NJ 07410

Your Vote Counts!

As a voting member of our Institute, you should soon receive your 1998 IEEE Annual Election voting documents. Why bother? Well, again this year, we have the chance to elect yet more officers ourselves, which is a switch from the appointment process of the past. Never before have your chances to make a difference been greater! We will vote for the first time for: VP and VP-elect of the Technical Activities Board (TAB), as well as for the President of IEEE USA and a member at large of IEEE USA. Need more information on the candidates? We invite you to visit: <http://www.ieee.org/corporate/candidates.html>. The candidate's pages that are available will provide additional information about themselves and will help you determine who to support for each position.

An effort to amend the Bylaws will also be voted upon. To do this, we must have at least 20% voter participation. Since less than 20% usually participate in elections, this has been a stumbling block in the past to growth of the IEEE. PLEASE do consider voting this year to voice your opinion, and give this a chance to move forward. Your cooperation is highly appreciated by IEEE.

Earn Credit on Your Membership Dues by Recruiting New Members

<u>Recruit</u>	<u>Credit</u>
1 - 2 New Members	\$5.00
3 - 5 New Members	\$10.00
6 - 9 New Members	\$20.00
10 or More New Members	Free Membership for Year 2000

Get complete information and as many of the applications you will need, by contacting: Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605-2239, (201) 461-0900, Ext. 234, mornings, or email: don@kulite.com. This program runs through August 15, 1999.

NJ Computer Chapter:

Y2K Testing Techniques

On the 5th of November, 1998, the IEEE North Jersey Computer Chapter will hold a meeting on "Y2K Testing Techniques." The speaker will be Edward Flanagan.

About the Talk

First, Ed Flanagan will present a general overview of the typical types of Y2K problems that exist in corporate legacy and Client/Server systems. This will be followed by a description of the general Y2K remediation process that most companies are following in order to be ready for the next millennium. Generally, it has been estimated that testing will take about 50 percent of the Y2K remediation process timeline.

He will then discuss Y2K testing techniques that can be used to automate and reduce the time required to adequately test applications for proper operation in the next millennium. These techniques will include procedures using the latest development tools that can be used to simulate application processing not only with Y2K system dates, but also with data files aged to similar Y2K test dates.

About the Speaker

Edward T. Flanagan currently markets Interactive Analysis & Debugging products and services of the Compuware Corporation. He has 10 years of experience in the application software industry. His prior experience includes data center supervision and the marketing of mainframe and client server software solutions for Computer Associates and the Legent Corporation.

All Welcome

You do not have to be a member of the IEEE to attend. Anyone involved in the Y2K remediation process may want to attend, particularly those who will be involved in testing. Please mark your calendars.

Time: 7:30 PM, Thursday, November 5, 1998. Free buffet starting at 6:30 PM.

Place: KDI Triangle Corp., 60 South Jefferson Road, Hanover, NJ. Park and enter from right rear of building.

Information: Howard Leach, 973-540-4485, or Venugopal Tirmalai at 973-367-8281.

North Jersey Section Activities November 1998

Nov. 4-"NJ Section Executive Committee Meeting" - 7:00 PM, ITT, 100 Kingsland Road, Clifton, NJ. Keith Saracinello (973) 515-8829 or k.saracinello@ieee.org.

Nov. 5-"Y2K Testing Techniques" - NJ Computer Chapter. Howard Leach, 973-540-4485, or Venugopal Tirmalai at 973-367-8281.

Nov. 7-"The IEEE Fall 1998 Professional Skills Development Workshop" - NJ Student Activities Committee. Amit Patel (973) 284-2708, a.j.patel@ieee.org.

Nov. 14-"NJ Performing Arts Center Tour" - NJ IAS/PES Chapters. Advanced registration required. Ken Oexle (973) 386-1156.

Nov. 17-"Anheuser-Busch Newark Plant Tour" - NJ Section PACE and GOLD, 4:15 PM, bus departs from Willowbrook area, Wayne, NJ. Rodney Cole, rod-tonya-cole@worldnet.att.net.

Members and Non-Members Welcome PLEASE POST

Engineers Have Few Friends in Washington

— by Richard F. Tax

In September, 1998 our Congressional representatives voted on two pieces of legislation that are significant and detrimental to members of the engineering community. We thought you might be interested in the legislation and how your New Jersey representatives voted. You may want to call their offices, both local and in Washington, to express your gratitude or other sentiments.

First, about this legislation to increase the number of H1-B visas for imported engineers, software people, information technologists, etc. The final results of the legislation will increase the number of H1-B visas from 195,000 to 337,000 over the next three years or a total increase of 142,000. Each H1-B import may stay and work for 6 years for a total of 2,022,000 man years of Americans being deprived of opportunities to earn a living and enhance their skill level.

HR3736, a Republican introduced Bill was up against a threatened veto by the Whitehouse which brought down some of the original numbers, but offered little protection for US workers. The Watt Amendment offered some protection, but both Bills were based on false manpower shortage reports. President Clinton had the opportunity to veto the legislation, but instead followed up his lack of action with a trip to Silicon Valley to pick up 4 Megabucks of party contributions from Corporate America.

How our representatives, of both

parties, could support such blatant legislation is beyond my comprehension. It was supported only by fabrications and corporate American dollars.

Robert Rivers, a Fellow of the IEEE, past member of IEEE-USA's Workforce Committee, Chairman of the Manpower Committee of the American Engineering Association, and considered an expert in engineering manpower issues writes:

"The H-1B visa expansion bill is a scam perpetrated upon Congress and US citizens." He continues with: "The lobbying program by the Information Technology Association of America (ITAA) for expansion of H-1B visas is based on three false premises. Two ITAA sponsored "shortage" surveys that have been discredited by the GAO and the disclosure that working contract personnel were classified as job vacancies. The knowing use of previous Computer Science declines in numbers of new graduates and failure to mention markedly increasing enrollments was an exercise in obfuscation.

The first ITAA survey was conducted by a journalist Stuart Anderson and the GAO discredited that survey. The second survey was conducted by a Virginia Tech graduate student with no past surveying experience. The GAO discredited that survey.

The whole program was devised by ITAA, a pseudo professional group not of Information Technologists, but of Corporate America, to convince the press and Congress that the sky would fall if we didn't increase the H1-B program. ITAA starting with their defective 190,000 job vacancies report and continued with their

discredited 346,000 vacancy Virginia Tech survey.

Contrasting the ITAA's survey pronouncements is the professional Louis Harris & Associates survey commissioned by the Institute of Electrical and Electronics Engineers-USA (IEEE-USA) that found "82% of a national cross section of 1000 adults opposed "Congress allowing US companies to sponsor 190,000 additional foreign technical workers as employees for up to 6 years." Some 86% concurred with the statement; "US companies should train US workers to perform jobs in some technical fields, even if it is faster and less expensive to fill the jobs with foreign professionals."

Rivers' concludes: "Summarizing; we don't need the H-1Bs now, we don't need them in the long run, and we certainly don't need any without effective attestations to protect US workers. We need to give US citizens, our parents, our children, our friends and associates a shot at the good jobs."

More information on how the rest of the Congress voted can be found on the WEB at www.numbersusa.com. AEA is at www.aea.org. IEEE-USA is at (202) 785-0017

For supporting documentation please contact Robert A. Rivers, Chair, American Engineering Association, Manpower Committee. T 978-544-3942, Fax 978-544-9902. Richard Tax was past chairman of the North Jersey Section and is presently Vice President of the American Engineering Association, Inc.

Representatives Votes on H.R. 3736 and the Watt Amendment							
				Watt Amendment		Modified HR3736 Smith Bill	
First	Last	Dist	Pty	PRO	CON	PRO	CON
Donald	Payne	10TH	D	x		x	
Rodney	Frelinghuysen	11TH	R		x	x	
Mike	Pappas	12TH	R		x	x	
Robert	Menendez	13TH	D	x		x	
Robert	Andrews	1ST	D	x			x
Frank	LoBiondo	2ND	R		x		x
James	Saxton	3RD	R		x	x	
Christopher	Smith	4TH	R		x		x
Marge	Roukema	5TH	R		x	x	
Frank	Pallone	6TH	D	x		x	
Robert	Franks	7TH	R		x		x
William	Pascrell	8TH	R	x		x	
Steven	Rothman	9TH	D				x