

The



IEEE Newsletter

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

Congratulations To Our New Senior Members!

January: George E. Georgiou
Gail R. Lalk
Lawrence Nagel
Ruth Pennoyer
Richard Steinel, Jr.
Joseph A. Tarallo

February: Jim Brinksma

April: George F. Farris
Eric H. Grosse
Toshikazu Kodama
Sven Loncaric
Michael D. Riley
Stephen B. Seidman

May: Yunsong Yang

June: Carl R. Davidson
Ilan Golecki
George E. Rittenhouse
Ronald A. Schroeder
Emina Soljanin
Kurt Stern
Harish Viswanathan

October: John Ricky

November: Jeff D. Bude
Francis E. O'Brien
Vinay A. Vaishampayan
Adriaan J. van Wijngaarden
Monte H. Wallenstein
Walter Willinger

Add your name to the list of Senior Members. All new Senior Members will receive an engraved wood and bronze Senior Member plaque from the IEEE.

To get information and an application to advance to Senior Member Grade, give your name and mailing address to:

Gary Hojell
ITT Aerospace Communications
100 Kingsland Rd
Clifton, NJ 07442
Telephone: (973) 284-2493
FAX: (973) 284-4778
E-mail: gary.hojell@ieee.org

IEEE Personal Email Alias Service with Free Virus Scanning

Did you know that as an IEEE Member you can sign-up for an IEEE email alias? This service is free to all IEEE members and offers the following benefits:

- Clarity - An IEEE alias is easy to acquire, remember and update online
- Constancy - Your alias stays @ieee.org even when your email address changes
- Convergence - You'll identify yourself to other IEEE members
- Connectivity - Email messages are automatically forwarded to your real Internet address
- Comfort - Attachments to emails sent to your alias will automatically be scanned for viruses

To sign-up for this service, visit

<http://eleccomm.ieee.org/personal-aliases.shtml>

Newly Elected IEEE Fellows

The North Jersey Section IEEE congratulates the following members who were elected to the Fellow grade:

Dr. Atam P. Dhawan

"for contributions to optical imaging of skin-lesions and multi-modality medical image analysis."

Dr. Spencer P. Kuo

"for contributions to the understanding of electromagnetic wave propagation in plasmas."

Dr. Wim Sweldens

"for contributions to multiresolution methods for image and 3D geometry compression."

Dr. Stuart K. Tewksbury

"for contributions to telecommunications and interconnections in high performance digital systems."

January 2004

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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 "AT" ieee.org* or to *The IEEE Newsletter, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (908) 791-4067.*

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:

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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Naz Simonelli (naz@sprynet.com)
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.

NJ Section PACE:

Engineers Meet

Current Activities:

NJ Legislative Action,

Victims Report

On Wednesday, January 14, 2004, the North Jersey Section Professional Activities Committee will meet to discuss Legislative Action involving the off-shoring of NJ state jobs, networking, contracting engineering and NSF shortage fabrications.

About the Meeting

This meeting provides an opportunity to meet and discuss action items relating to 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.

This year the H-1B numbers were rolled back to 65,000 from 195,000. And, please do not confuse this as an "immigration" issue. This is all about money and wage busting.

Networking and contract engineering (time permitting) issues will be discussed.

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.

About the Speakers

Our two special guest speakers, Sona Shah and Kai Barrett, victims of the H-1B visa program, will describe their experiences and discuss their recent trips to DC to meet with legislators and CNN. Sona and Kai have been fighting a court case for five years -- come hear their story first-hand. You may be next.

You do not have to be unemployed to attend. All jobs are being threatened. Now is a time to work to build a better profession. You are encouraged to attend and bring your spouse and associates.

All 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. We now include members from

ASME and AEA.

Time: 6:30 to 8:30 PM, Wednesday, January 14, 2004.

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.

IEEE PES/IAS Chapters
Present
**Power Transformer
Technical Seminar**

March 25, 2004

The PES and IAS Chapters will sponsor a one-day seminar covering various topics related to power transformers. The session will be held on Thursday, March 25, 2004. Details to follow in the February Newsletter.

**Need Help?
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a Crisis!**

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REGISTERED PATENT ATTORNEY

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BSEE, MSEE (system architecture and applications software). Over 10 years of patent prosecution experience with NYC intellectual property and high-tech law firms. Former in-house senior patent counsel with a multinational corporation. Patent applications, opinions, counseling, litigation support. Personal attention, high quality, reasonable fees. References upon request. For more information please visit my website.

IEEE North Jersey Section Activities

January 2004

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.

Jan. 7 – “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.

Jan. 14 – “Engineers Meet: Current Activities: NJ Legislative Action, Victims Report” - 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).

Jan. 20 – “Sound Cancellation Treatment of Monofrequency Tinnitus” - NY/NJ/LI EMBS, 6:30 PM Reception, 7:30 PM Program, New York Academy of Medicine, Fifth Avenue at 103rd Street, New York, NY. Joel H. Levitt, (212) 479-7805 (24 hr voice mail), jlevitt@pratt.edu.

Jan. 27 – “Inside Internet E-Mail” - NJ Computer Chapter, 7:00 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Seth Jakel (973) 731-1902 (sgjakel@comcast.net) or Vivek Shaiva (908) 229-6125 (vshaiva@computer.org).

Jan. 29 – “Web-Based and Email Marketing” - NJ Consultants' Network, 7:30 PM, Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Upcoming Meetings

Feb. 4 – “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.

Feb. 16-Apr. 12 – “Introduction to JAVA Programming” - North Jersey Section, Monday Evenings, 8 sessions, 6:30-9:00 PM, Wessley Inns & Suites, 265 Route 3 East, Clifton, NJ. Bhanu Chivakula (b.chivakula@computer.org).

Feb. 18-Apr. 14 – “Project Management” - North Jersey Section, Wednesday Evenings, 8 sessions, 6:30-9:00 PM, Wessley Inns & Suites, 265 Route 3 East, Clifton, NJ. Bhanu Chivakula (b.chivakula@computer.org).

Feb. 24 – “Model Driven Architecture (MDA) - A Practical Perspective” - NJ Computer Chapter, 7:00 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Seth Jakel (973) 731-1902 (sgjakel@comcast.net) or Vivek Shaiva (908) 229-6125 (vshaiva@computer.org).

Feb. 26 – “A Modular Approach to Proposals” - NJ Consultants' Network, 7:30 PM, Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Mar. 18 – “NJ Energy Auctions” - NJ IAS/PES Chapters, 7:00PM, Eaton/Cutler Hammer, 690 Rahway Ave, Union, NJ. Ron Quade (212) 833-0268.

Mar. 25 – “Power Transformer Technical Seminar” - NJ IAS/PES Chapters, time and location TBA. Details to follow in the February Newsletter.

Members and Non-Members Welcome
PLEASE POST

NJ Consultants' Network:

Web-Based and Email Marketing

On Thursday, January 29, 2004, the IEEE Consultants' Network of Northern NJ (CNNNJ) will host a talk on "Web-Based and Email Marketing." The speaker will be Ed McCauley.

About the Talk

It is increasingly common today for those who have very specific needs to turn to the Web in search for solutions. This is particularly true for technical consumers with esoteric requirements.

Conversely, those offering such services make their presence visible via web pages or email marketing.

The presentation will explore benefits and pitfalls of this strategy. The interactive session will cover how Ed McCauley's company is learning to leverage a combination of email marketing, technical web pages, and non-technical web pages to market their services. Topics will include such marketing issues as:

- Industry trends
- Defining goals and target audience
- Defining the target audience
- Contact database generation
- Content, search engine issues

About the Speaker

Ed McCauley is the President and Founder of Bottom Line Technologies Inc. (BLT), a 15-year old electronic design services provider based in New Jersey.

Ed started his career as part of a startup team, which grew from the basement to over 300 people and an acquisition. Next, he joined another startup, Xilinx, as FAE covering the northeastern U.S. After two years and their IPO, he left to start BLT.

Today he is primarily responsible for Marketing, Sales, and Finance, although his engineering and project management skills are often called upon to fulfill specific client needs.

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.

Time: 7:30 PM, Thursday, January 29, 2004.

Place: Aeroflex/KDI-Integrated Products, 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.mcekti-integrated.com/directions.htm>.

NJ Computer Chapter:

Model Driven Architecture (MDA) - A Practical Perspective

On Tuesday, February 24th, 2004, the IEEE North Jersey Section Computer Chapter will host a presentation on "Model Driven Architecture (MDA) - A Practical Perspective" by Frank Middleton.

About the Talk

MDA has the potential to radically change the way software systems are constructed, enabling significant reuse, eliminating defects, and dramatically reducing implementation and maintenance costs. Join us for a survey of the state of the art in MDA, looking at various standards and products, some better known than others. The talk will finish up with experience from the field using one of the lesser known (but mature) tools used to implement a large commercial system.

UML based MDA is limited to real time systems today, but there is no reason it can't be used for general IT solutions, and it can be. We'll look at the primary contenders for the MDA market and discuss limitations and benefits of each, looking at UML2 and how apparently dissimilar methodologies map into each other.

This talk should be of interest to anyone who has project oversight for any system sufficiently complex to require modeling.

About the Speaker

Frank Middleton is the President and Founder of Apogee Communications Technologies, Inc., a 10-year old IT consulting services provider based in New Jersey that specializes in reducing costs and improving productivity and security in small to midsize companies by leveraging best of breed technologies, including process management through MDA. For more information, visit <http://www.apogeect.com> and also subscribe to his newsletter by sending an email with subject "subscribe" to news-request@apogeect.com. Frank has many years of experience in IT at various companies including Citibank and AT&T, a Masters in Computer Science from the Courant Institute of Mathematics, NYU, and is a member of the IEEE, the IEEE/CS, and the ACM.

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 6:00 PM.

Time: 7:00 PM, Tuesday, February 24, 2004. Pre-meeting buffet starting at 6:00

PM in the Public Meeting Room, Morris County Library.

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

Information: Seth Jakel, (973) 731-1902 (sgjakel@comcast.net) or Vivek Shaiva, (908) 229-6125 (vshaiva@computer.org).

NJ PES/IAS Chapters:

NJ Energy Auctions

The Power Engineering and Industrial Applications Chapters will sponsor a technical meeting on March 18th concerning forces that are affecting the cost of electric energy in New Jersey. The speaker is Peter Yochum of New Jersey Board of Public Utilities.

About the Talk

In 1999 New Jersey enacted deregulation legislation to make the retail natural gas and electric markets competitive. The New Jersey Board of Public Utilities ("BPU") was charged with the responsibility of implementing this legislation. There were two basic aspects of implementation. The process portion: enrollment, metering, billing and consumer protection produced what is generally considered a workable framework for competition. However in the area of rate design, fixed retail commodity rates during a period of rising wholesale costs hindered the ability of retail suppliers to compete.

The Board is now implementing new initiatives including an internet-based auction process to secure market-based prices, and pricing certain larger customers on an hourly basis. The Board will be conducting its third electric supply auction in February 2004. Peter Yochum's presentation will focus on the outcome of the latest auction, the reasons behind and the future of hourly pricing.

Time: 7:00 PM, Thursday, March 18, 2004.

Place: Eaton/Cutler Hammer 690 Rahway Ave Union, NJ. Directions: Route 82 Morris Avenue from either Springfield or Union to Rahway Ave.

Information/Map: Ron Quade (212) 833-0268.

NY/NJ/LI EMBS:

Sound Cancellation Treatment of Monofrequency Tinnitus

On Tuesday, January 20, 2004, the New York Academy of Medicine's Sections on Biomedical Engineering and Otolaryngology together with the Engineering in Medicine and Biology Society (New York/LI/North Jersey Chapter) of the Institute of Electrical and Electronic Engineers will host a program on "Sound Cancellation Treatment of Monofrequency Tinnitus." The speakers will be Drs. Daniel Choy, Sujana Chandrasekhar, Cheuk Tang, and Jack Vernon.

About the Talk

Tinnitus (hearing of endogenous sounds) is a poorly understood disorder that affects an estimated 50 million Americans. It is not well understood and has been associated with conditions ranging from cardiovascular valvular lesions to auditory and central nervous system tumors to post-infectious and traumatic events. It can be quite debilitating. VanGogh is thought to have suffered tinnitus and cut off his ear as a consequence. Treatments to date have included lidocaine injection, acupuncture, behavior modification, sound habituation, dietary control of insulin, and exogenous "broad-band" white noise masking. All have met with limited success. The program will present a brief overview of tinnitus and current treatment regimens. The principles underlying a new method of treatment for monofrequency tinnitus employing sound cancellation techniques will be discussed, and results from initial clinical tests using sound cancellation will be presented.

About the Speakers

Dr. Daniel Choy received his MD Degree from Columbia University College of Physicians and Surgeons, New York, NY in 1949. He completed his residency in Internal Medicine and Oncology in 1954 at Columbia. He is currently an Assistant Professor of Medicine at Columbia University College of Physicians and Surgeons, and is Director of the Laser Spine Center in New York, NY. He is an attending physician at the Lenox Hill Hospital and formerly Director of the Laser Laboratory at St. Luke's-Roosevelt Medical Center, and a founding member of the American Board of Laser Surgery. He has a diverse background in biomedical research and application of innovative technologies in Medicine and Bioengineering. He is a Fellow of the NY Academy of Medicine and is secretary of the Bioengineering Section.

Dr. Sujana Chandrasekhar received her MD Degree from Mount Sinai School of Medicine, New York, NY in 1986. She completed her residency in Otolaryngology and Head and Neck Surgery at New York University Medical Center. She is currently an Associate Professor of Otolaryngology and Director of Otolaryngology at Mount Sinai School of Medicine. She is widely published and is a recognized expert on otologic oncology and the otologic effects of HIV.

Dr. Cheuk Ying Tang received his PhD in Radiological Sciences from the University of California at Irvine, Irvine, CA in 1999. He is an Assistant Professor of Radiology and Psychiatry, and Director of Neurovascular Imaging Research at the Mount Sinai School of Medicine. He is actively involved in research and clinical application of functional and high resolution magnetic resonance imaging of the brain.

Dr. Jack Vernon received his PhD in Psychology from the University of Virginia in 1952. He is a former Professor of Psychology at Princeton University, and Professor Emeritus of Otolaryngology and Director of the Hearing Research Center at the Oregon Health Sciences University in Portland, OR. He is on the Board of Directors, and is a founding member of the American Tinnitus Association. He is also a member of the American Academy of Otolaryngology, Head and Neck Surgery. He is a recipient of the Robert W. Hocks Award for Outstanding Research in the Field of Tinnitus. He has written several books and numerous articles on tinnitus, and is the inventor of several wearable tinnitus and hyperacusis masking systems.

Pre-Meeting Reception

A reception prior to the meeting will be held at the New York Academy of Medicine starting at 6:30 PM.

Time: Program 7:30 PM, Tuesday, January 20, 2004 (6:30 PM reception).

Place: New York Academy of Medicine, Fifth Avenue at 103rd Street, New York, NY. (Limited free parking in NYAM enclosed lot at 2 East 103rd Street. By subway, #6 to 96th, walk to 5th Ave, walk to 103rd is easier than via 103rd St. station.)

Information/Reservations: New York Academy of Medicine - Office of Medical Education, (212) 822-7272 (dmorcone@nyam.org); IEEE EMBS: Professor Joel Levitt, (212) 479-7805 (jlevitt@pratt.edu).

NJ Computer Chapter:

Inside Internet E-Mail

On Tuesday, January 27th, 2004, the IEEE North Jersey Section Computer Chapter will host a presentation titled "Inside Internet E-Mail" by Ed Levinson.

About the Talk

This talk uses the Internet's first killer application, email, and its protocols to explore both the technology and the organization that created it. You'll see how the email protocols are built up from very simple protocols to yield extraordinary versatility and adaptability. The talk also illuminates the structure of the Internet Engineering Task Force, under whose auspices the protocols are developed and approved. The IETF, a volunteer organization, provides a model for co-operative distributed engineering. The success of the Internet speaks volumes about the IETF and the talk will provide insights into its workings.

About the Speaker

Dr. Edward Levinson is the author of the email protocols that make it possible to send web pages via email. He has managed software development teams and served the US Army as a consultant for document transfer and strategic planning. Dr. Levinson started his career at Bell Laboratories and has also worked in small and mid-sized companies. He studied Electrical Engineering at Washington University in St. Louis and received his doctorate from the University of Pennsylvania.

Currently, Ed Levinson coaches technology professionals and business owners.

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 6:00 PM.

Time: 7:00 PM, Tuesday, January 27, 2004. Pre-meeting buffet starting at 6:00 PM in the Public Meeting Room, Morris County Library.

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

Information: Seth Jakel, (973) 731-1902 (sgjakel@comcast.net) or Vivek Shaiva, (908) 229-6125 (vshaiva@computer.org).

NJ Consultants' Network:

A Modular Approach to Proposals

On Thursday, February 26, 2004, the IEEE Consultants' Network of Northern NJ (C>NNNJ) will host a talk on "A Modular Approach to Proposals." The speaker will be Paul Rota.

About the Talk

Paul Rota will present a proven approach for creating effective written proposals.

The techniques for writing an effective proposal are not necessarily self-evident. Some consultants acquired their proposal-writing skills from previous employers, others through trial and error. All of us who struggle through the proposal process would welcome a simple and accessible methodology or template.

Paul Rota will speak on the modular approach to proposals (MAP), a uniform and organized process for developing a document and easing the proposal-writing process.

Originated by the Defense industry to ease preparation of written proposals for Federal Government agencies, MAP has been successfully applied to technical reports, handbooks, business plans, and project plans. The methodology is highly structured but flexible enough to leave room for creativity. It reduces the time and cost to prepare a document and provides a genuine picture of what the document will look like before a single word is written. Besides easing the writing process, MAP improves readability and enhances the management of large documents.

About the Speaker

Paul Rota has been an independent computer consultant for 25 years, serving Fortune 500 companies and smaller organizations. He recently completed a six-year assignment with the NYSE and AMEX helping develop wireless LAN systems. He specializes in systems analysis, discrete system simulation, and in documenting user requirements, functional requirements, and general design specifications. He has presented papers at national symposia and private seminars. Mr. Rota previously worked in the defense industry.

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.

Time: 7:30 PM, Thursday, February 26, 2004.

Place: Aeroflex/KDI-Integrated Products, 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.mcekdi-integrated.com/directions.htm>.

U.S. IEEE Members' Median Income Tops \$100,000, IEEE-USA Salary Survey Reveals

Washington (5 December 2003) - The median salary for U.S. IEEE members topped \$100,000, according to the latest IEEE-USA Salary & Fringe Benefit Survey.

Median incomes from primary sources - base pay plus any self-employment income, commissions, or bonuses - for U.S. members working full time in their area of professional competence increased from \$93,100 in 2000 to \$101,000 in 2002. When accounting for inflation and stated in 2000 dollars, 2002 purchasing power was \$96,677, an increase of 3.8 percent.

"Despite sharp declines in demand for electrical, electronics and computer engineers, the IEEE's U.S. members have held onto the gains in pay they achieved in recent years," IEEE-USA survey analyst Richard Ellis said. "Members were able to stay ahead of rises in the cost of living and achieve further gains in their real incomes."

The survey also mirrors recent unemployment trends. The number of members reporting involuntary unemployment jumped from less than one percent in 2001 to four percent in 2003. This is the highest level of member unemployment ever recorded, more than double the levels reached in the recession periods of the mid-1970s and early 1990s. Nevertheless, U.S. IEEE members were out of work at a much-lower rate than their non-IEEE counterparts.

The U.S. Department of Labor reported that the unemployment rates for all electrical and electronics engineers reached an all-time high of 7.0 percent in the first quarter of 2003, and stood at 6.7 percent in the third quarter. The third-quarter jobless rate for computer hardware engineers increased to 6.9 percent, while the rate for network and computer systems administrators reached 7.6 percent.

The survey results reflect typical levels of compensation for the membership as a whole. Most individuals have done better because, in addition to improvements in the general pay scale, they have also

obtained raises that reflect increases in their skills and levels of experience. Further, the survey shows wide variations in the compensation of otherwise similar people. Pay for members with similar specialties and job functions, types of employers, geographic locations, education and amount of experience varies by more than \$50,000 between those at the lowest and highest ends.

"This is clear evidence," said IEEE-USA's Ellis, "that sheer skill and general mastery of the work is still the key to top pay, and is much more important than choices of specialization or other variations in career paths."

The Web-based survey is based on 2002 data from the largest number of complete responses (11,137) since the survey was first administered in 1973, and is the IEEE's most accurate portrait of U.S. member compensation. The survey can be taken any time, and members who do so receive free one-year access to the IEEE-USA Salary Service. This career-management tool, along with the survey, is available at <http://www.ieeeusa.org/careers/salary/>. It provides U.S. IEEE members with an individual salary calculator for each year they take the survey, and additional features - such as a personal salary history - are scheduled for introduction in 2004.

A sophisticated compensation product for employers, the IEEE-USA Salary Database, is currently under development. Further information will be available at

<http://www.ieeeusa.org/careers/salarydatabase/>

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.

IEEE North Jersey Section Course Project Management

Wednesday Evenings, February 18, 2004 through April 14, 2004 (No class on March 3) 8 weekly classes (February 18, 25, March 10, 17, 24, 31, April 7, 14 2004) at Wellesley Inn & Suites, 265 Route 3 East, Clifton, NJ 07014
(Checks should not be mailed to this address)

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 1500+ Project related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, pinpoint possible solutions, and provide information to keep the project under control. Using Microsoft Project 2002 software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

The IEEE certificate of completion will be given to you when you finished this course. You may wish to take two Certification exams, one in Project Management administered by Project Management Institute and the other in IT Project+ by CompTIA Inc.

Instructor: Donald Hsu, Ph.D., has been a corporate manager for 11 years and is an experienced trainer. Since 1999, he has trained 150+ people in *IT Project+*, *MS Project 2002*, and *Project Management* courses in five organizations.

TOPICS

1. Explain the need for a project manager
2. Define SOW, PERT, GANTT, CPM, and Scope of the project
3. Identify the team members, resources and plan for the strategy
4. Calculate schedule, budget variances, and monitor project progress
5. Manage changes, estimates, and communications
6. Set a baseline, import tasks from MS Excel, export Project files to MS Word
7. Create and modify custom reports, templates and combination views
8. Share resources and create a master plan loaded to Project Server
9. Approve updates and conclude a project plan
10. Analyze Global E-Commerce and present student 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 February 4, 2004 will require a late fee of \$25. No reservations will be accepted after February 11, 2004.

WHEN: 8 Sessions, Wednesdays, February 18, 25, March 10, 17, 24, 31, April 7, 14, 2004, 6:30-9:00 PM.

COST: With textbook or notes: IEEE (& affiliate) members \$375; Non-IEEE members \$475.

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

REGISTRATION: Project Management

Please email details to address b.chivakula@computer.org and upon confirmation, the address where to mail the checks with details as described under, would be replied **(Checks payable to "North Jersey Section IEEE" with registration form should be mailed to this address)**

Bhanu Chivakula, Chair Education Committee, IEEE North Jersey Section, 19 Prestwick Way, Edison, NJ 08820

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

Non-member

☞ email address ☜

IEEE Member 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 February 11, 2004. 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: _____

IEEE North Jersey Section Course Introduction to Java Programming

Monday Evenings, February 16, 2004 through April 12, 2004 (No class on March 1- eight weekly classes (February 16, 23, March 8, 15, 22, 29, April 5, 12 2004) at Wellesley Inn & Suites, 265 Route 3 East, Clifton, NJ 07014
(Checks should not be mailed to this address)

The North Jersey Section IEEE is offering an evening course entitled "Introduction to Java Programming." Java Programming has gained enormous popularity in corporate Information System applications as well as in advanced Webpage Design since 1997. 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 business intelligence and mainframe data-warehouse access.

Java is an easier transition for C++ Programmers. This course, however, will be for anyone who *never took* a programming course. The instructor will provide the necessary software (compiler and editor) for you to get started immediately!

Instructor: Donald Hsu, Ph.D., has been a corporate manager for 11 years and is an experienced trainer. Since 1997, he trained 350+ people in Java Programming and Advanced Java Programming courses in eight organizations.

TOPICS

1. Explain the dynamic growth in Java Programming
2. Contrast the importance of AWT, CGI, JavaScript and HTML
3. Classify the different types of Java applets vs Java applications
4. Identify the control structures, arrays and classes
5. Construct character strings and graphics tools
6. Define multithreading, files and streams
7. Draw multimedia, animation and Swing images
8. Build audio files, JavaBeans and networking applications
9. Distinguish Java utilities, error handling, serialization and reflection
10. Analyze real-world projects using SDK 1.4 development tools

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 February 2, 2004 will require a late fee of \$25. No reservations will be accepted after February 9, 2004.

WHEN: 8 Sessions, Mondays, February 16, 23, March 8, 15, 22, 29, April 5, 12, 2004, 6:30-9:00 PM.

COST: With textbook or notes: IEEE (& affiliate) members \$375; Non-IEEE members \$475.

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

REGISTRATION: Introduction to Java Programming

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