

The



IEEE Newsletter

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

NJ Consultants' Network:

10th Anniversary Celebration & Annual Workshop

On Thursday evening, December 5th, the IEEE Consultants' Network of Northern NJ will sponsor its 10th Anniversary Celebration.

About the Celebration

The December meeting is our official IEEE-CNNNJ 10th Anniversary Celebration. This special meeting will be a catered event at MCE-KDI Corp. (i.e. no pre-Meeting dinner at the Marriot). Some of the activities planned are:

- ❑ Presentation of Sponsor Plaque to MCE-KDI Corp., our meeting site sponsors. Carl Schraufnagl, VP-Sales & Marketing, Larry Silverman, VP-Engineering & CTO, and Mike Snyder, President & CEO, will be on hand to accept the award.
- ❑ Long time IEEE-CNNNJ members will be acknowledged -- 10-year (Founding Members) and 5+ year members will be honored.

Founding Members: Jim Boyd, Edward R. Byrne, Ralph A. Giffone, Dirk A. Plummer, PE, Alex Richardson, PE, Merrill Rutman, Robert Walker, PE

5-year+ Members: Eric Holme, Ira J. Pitel Peter K. Schutz, PE Pat Banker Warren Umholtz

- ❑ Fun event --- we will be collecting engineering-related cartoons we have all seen and enjoyed over the years and will present them as a background slide show during a casual networking session among members and guests. Anyone wishing to submit cartoons (in .jpg format if possible) for this session should send them to j.boyd@ieee.org or by mail to: Jim Boyd, XL Research Inc., PO Box 256, Ironia, NJ 07845.

After the Festivities

Following the Anniversary Celebration, there will be a brief working session for IEEE-CNNNJ members and potential members. This Working Session is traditionally an open forum to determine what the IEEE-CNNNJ is doing right or wrong. The floor will be open to suggestions for improvements to the CNNNJ in general, its website or new feature topics for the general meetings.

All Welcome!

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

Time: 6:00 PM, Thursday, December 5, 2002.

Place: MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ.

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.kditriangle.com/directions.htm>.

NJ Section PACE:

Unemployed Engineers

On Wednesday, December 11, the North Jersey Section Professional Activities Committee will meet to discuss the unemployment situation for engineers and members of the engineering community.

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 foreign workers imported under the H-1B legislation. This year the legislation

increased the number of H-1B workers to about 200,000 while citizens have been discarded and replaced by foreign workers. 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. We will also like you to confirm your attendance via e-mail or telephone. When we reach a suitable attendance we will be able to invite the press to give visibility to the employment situation here in New Jersey.

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.

According to PACE Leaders "Employment Assistance and Career Development are high on their list of priorities. More on these projects can be found at www.ieeeusa.org

Registration is not required, but a numbers count will be helpful.

All Welcome!

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

Time: 6:30 to 8:30 PM, Wednesday, December 11, 2002.

Place: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 772-5500

Information/Registration: Richard F. Tax, (201) 664-6954 (rtax@bellatlantic.net), Paul Ward (973) 790-1625 (PWard1130@aol.com), Mike Rinaldi (973) 515-8195 (MikeRinald@aol.com).

December 2002

Volume 49, Number 6

Publication No: USPS 580-500

"The IEEE Newsletter" (North Jersey Section), is published monthly except June and July by The Institute of Electrical and Electronics Engineers, Inc. Headquarters: 3 Park Avenue, 17th Floor, New York, NY 10016-5997. \$1.00 per member per year (included in annual dues) for each member of the North Jersey Section. Periodicals-class postage paid at New York, NY and at additional mailing offices. Postmaster send address changes to: "The IEEE Newsletter", 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. USPS 580-500 (ISSN 1076-3732).

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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@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://www-ec.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

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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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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 Wayne Owens at (201) 767-3400, ext. 226, wowens@crestron.com.

North Jersey SMC Society:

Automatic Detection of Musical Structure

On Wednesday, December 11th, the NJ Systems, Man and Cybernetics (SMC) Chapter will host a presentation on "Automatic Detection of Musical Structure." The speaker will be Robert Turetsky.

About the Talk

Structure is present in music at many levels of abstraction, from genre, song, movement and phrase, down to characteristics of the raw audio signal. The ability to automatically extract musical structure at these levels has many potential applications, including the semantic indexing of personal digital music libraries, audio browsing/skimming and the creation of high-level musical models for use in algorithms such as pitch extraction.

In this talk, the speaker will present an overview of musical structure discovery, and the tools of the trade as borrowed from signal processing, machine learning, musicology and genomics. He will then discuss some recent advances in this exciting field and the ongoing work at LabROSA, the Laboratory for the Recognition and Organization of Speech and Audio. He will conclude with a vision for the near future, when computers have increased capabilities for "understanding" the semantics of the creative arts.

About the Speaker

Robert Turetsky is a PhD student at Columbia University in New York City, with concentrations in artificial intelligence, bio-informatics and signal processing. He is a graduate research assistant at LabROSA, Laboratory for the Recognition and Organization of Speech and Audio, under Professor Dan Ellis. He received BS degrees in Computer Science and Computer Engineering from Rutgers University in New Brunswick, NJ in May 2000. For five years he served as a consultant for Morgan Stanley, a prominent investment banking firm, developing web-based financial applications. Prior to that, he worked for two Internet start-up companies. His outside interests include electronic music and film-making

All Welcome!

You need not be a member of IEEE to attend and there is no charge for admission. Light refreshments will be served (starting at 7:15 PM).

Time: 7:30 PM, Wednesday, December 11, 2002. Please RSVP by 12/4, since the speaker's previous talk was heavily attended.

Place: Becton-402, Fairleigh Dickinson

University, Teaneck, NJ (Parking just off Rt. 4 and River Rd). The room assignment will be posted at the entrance to Muscarelle Hall auditorium if there is any change.

Contact/RSVP: Dr. Mike Liechenstein (973) 471-0721 (m.liechenstein@ieee.org) or Melvin Lewis (201) 692-2348 (m.lewis@ieee.org). Also check electronic newsletter for any possible changes in room, etc.

NJ Consultants' Network: Getting Started In Consulting

On Thursday evening, January 30th, IEEE Consultants' Network of Northern NJ will hold its monthly meeting, featuring a panel discussion titled "Getting Started in Consulting."

About the Talk

Due to downsizing and budget cuts, an increased number of companies are considering consultants to fulfill their needs, while at the same time many engineers look at independent contracting as an alternative career path. The discussion will explore issues facing prospective consultants, such as motivation and risks, logistics and organization of business, marketing and contracts.

About the Panelists

Some of CNNNJ's long-term members will offer their thoughts on operating a consulting business and share their personal experiences.

Laurie Cox is the President of RLC Designs, Inc. and has been consulting for more than 10 years. Laurie specializes in FPGA design of digital signal processing algorithms, and also provides software services in C/C++, VBasic and assembly languages for embedded designs and PC-based applications. She can be reached at: (973) 663-5778, lcox@rlcdesigns.com.

Dr. Ira J. Pitel, President of Magna-Power Electronics, is responsible for contract R&D and manufacturing of his company's line of 3.3-750 kW DC power supplies. Ira holds many patents in the field of power electronics and is a Fellow of the IEEE. He can be reached at: (973) 263-0017, i.pitel@ieee.org.

Peter Schutz of Schutz Engineering specializes in office, medical and laboratory equipment. Peter's area of expertise includes: mechanical components and systems, plastics, pneumatic and fluid systems, thermal design and analysis, packaging of electronics, enclosures, process control systems, CAD and prototypes. He can be reached at: (908) 277-4100, shutze@compuserve.com.

Robert Walker of RD Walker Engineering has been offering analog and digital design services since 1987. Robert's expertise includes sensing, conditioning, control and telecommunication equipment, utilizing discrete design as well as embedded controllers and FPGA's. Contact: (973) 728-4500, robert@rdwalker.com.

About the Consultants' Network

The IEEE Consultants' Network of Northern NJ was founded in 1992 to encourage and promote 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, January 30th, 2003.

Place: MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ.

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.kditriangle.com/directions.htm>.



George Kannell, Technical Session Chair, presents appreciation plaque to Har Dayal, a speaker at the MTT/AP Symposium and Mini-Show in Wayne, NJ. Nearly 200 people registered for the event which featured 12 technical presentations and over 30 exhibitors.

IEEE North Jersey Section Activities December 2002

Dec. 5—"10th Anniversary Celebration & Annual Workshop" – NJ Consultants' Network, 6:00 PM, MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Dec. 11—"Automatic Detection of Musical Structure" – NJ SMC Society, 7:30 PM (check webpage to confirm), Becton-402, Fairleigh Dickinson University, Teaneck, NJ. Dr. Mike Liechenstein (973) 471-0721 (m.liechenstein@ieee.org) or Melvin Lewis (201) 692-2348 (m.lewis@ieee.org).

Dec. 11—"Unemployed Engineers" – NJ PACE, 6:30 – 8:30 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Richard F. Tax, (201) 664-6954 (rtax@bellatlantic.net), Paul Ward (973) 790-1625 (PWard1130@aol.com), Mike Rinaldi (973) 515-8195 (MikeRinald@aol.com).

Upcoming Meetings

Jan. 29-Apr. 2—"JAVA Programming" – North Jersey Section, Wednesday Evenings, 10 sessions, 6:30-9:00 PM, Ramada Inn Clifton, 265 Route 3 East, Clifton, NJ. Bhanu Chivakula (b.chivakula@computer.org).

Jan. 30—"Getting Started In Consulting" – NJ Consultants' Network, 7:30 PM, MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Feb. 5—"NJ Section Executive Committee Meeting" – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or wowens@crestron.com.

Mar. 12—"IEEE Sarnoff Symposium 2002 - Advances in Wired and Wireless Communications" – Time TBA, The College of New Jersey, Ewing, NJ. Dr. Gerhard Franz (609) 936-1919 (g.franz@ieee.org).

Mar. 15—2004 IEEE Fellow Nominations Due.

Members and Non-Members Welcome
PLEASE POST

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 Seminar

JAVA PROGRAMMING

*Wednesday Evenings, January 29, 2003 through April 2, 2003, Ten weekly classes
(Jan. 29, Feb. 5, 12, 19, 26, March 5, 12, 19, 26 and April 2) from 6:30 PM to 9:00 PM
Ramada Inn Clifton, 265 Route 3 East, Clifton, NJ 07014
(Checks should not be mailed to this address)*

The North Jersey Section IEEE is offering an evening seminar/course entitled "Java Programming." This course, however, will be for anyone even if he/she has never taken a programming course. The instructor will provide the necessary software (compiler and editor) for everyone to get started immediately from ground zero! More assignments and handouts are planned this time.

Instructor: Dr. Donald Hsu, PhD, has been a corporate manager for 11 years and is an experienced trainer. Since 1997, he has trained 150+ people in Java Programming and Advanced Java Programming courses in five organizations.

TOPICS

Explain the dynamic growth in Java Programming, contrast the importance of AWT, CGI, JavaScript and HTML, classify the different types of Java applets vs Java applications, identify the control structures, arrays and classes, construct character strings and graphics tools, define multithreading, files and streams, draw multimedia, animation and swing images, build audio files, JavaBeans and networking applications, distinguish Java utilities, error handling, serialization and reflection and analyze real-world projects using SDK 1.3 development tools.

Class size will be limited to a maximum of 25. Early registration is recommended. The members are required to pre-register by calling Mr. Bhanu Chivakula on (732) 718-3818. Registration and checks are accepted only after pre-registration.

WHERE: Ramada Inn Clifton, 265 Route 3 East, Clifton, NJ. (Checks should not be mailed to this address)
WHEN: 10 Sessions, Wednesdays on Jan. 29, Feb. 5, 12, 19, 26, March 5, 12, 19, 26 and April 2; Time: 6:30-9:00 PM
COST: With textbook or notes: IEEE (& affiliate) members \$300; Non-IEEE members \$400.
CONTACT: Bhanu Chivakula - email b.chivakula@computer.org.

REGISTRATION: Java Programming

Please send checks with this form to Bhanu Chivakula, 19 Prestwick Way, Edison, NJ 08820. Include the sender's address and mark the envelope "Java Programming."

**(Checks payable to "North Jersey Section IEEE" with registration form should be mailed to this address)
Direct inquiries via email to B.Chivakula@computer.org.**

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 January 10, 2002. 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: _____