The IEEE Newsletter

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

NJ Computer Chapter:

Non-WWW Internet Services

On August 10th, 1999, the IEEE North Jersey Section Computer Chapter will host a presentation on "Non-WWW Internet Services" such as newsgroups, chat, powow, voice over IP, and video conferencing, by Eli Rohn of Rohn Consulting, LLC.

About the Talk

Many think of the Internet as 'Browsing or Surfing' using a browser such as IE, Netscape, Mosaic or similar programs. However, the Internet has many more services. For example, real time text based communication between two users via computers is done using chat programs and not via browsers necessarily. Project collaboration among geographically dispersed colleagues can be achieved using groupware, and not via a browser. Such tools typically consist of email, workflow, video, chat, and collaborative writing and drawing mechanisms.

Video conferencing over the Internet, voice over IP, are all non-WWW Internet based services. The presentation will cover how to use these services as well as where to find free software and what hardware might be required. After attending the presentation you'll be able to use the Internet to talk for free with relatives overseas or out of state, and even establish good quality yet rock-bottom priced video sessions with friend, family and colleagues on both a local and a global scale.

About the Speaker

Eli Rohn is the Managing Member of Rohn Consulting LLC. He has a Masters degree in Management of Information Systems from NJIT, and has published two technical books and over 30 professional articles. He renders consulting services to Fortune 500 companies on top of running his business. Eli, who started as a programmer, has over 15 years of experience with Mainframes, PCs, Networks, and has been involved with Internet technology for over five years.

All are welcome

You do not have to be a member of the IEEE to attend. Bring your friends.

Time: 7:00 PM, Tuesday, August 10, 1999.

Place: Dialogic, 1515 Route 10 (East bound from Route 202), Parsippany, NJ. Please park in front of the 1515 building and enter from front entrance.

Information and Pre-Meeting Dinner Reservations: Howard Leach, 973-540-4485.

Congratulations to the New Senior Members!

February 1999
Kamm, Candace A.
Kuo, Shyhshiaw
Rafferty, Conor S.

March 1999
Kintala, Chandra M.

April 1999
Levin, Vladimir

May 1999
Gamba, Mark
Sen, Dipanjan
Slomin, Michael S.

To get your application and information on advancing to Senior Member, send your name and mailing address to Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605-2239, (201) 461-0900 Ext 234, mornings, or don@kulite.com.

AUGUST 1999

NEWSLETTER STAFF

Editor...Keith Saracinello
Business Manager.................Theresa 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, 25 Messenger Ln, Ringoes, NJ 08551*, (732) 562-6472.

IEEE NJ SECTION HOME PAGE
http://www-ec.njit.edu/~ieeenj/
IEEE NJ SECTION NEWSLETTER HOME PAGE
http://www-ec.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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miltonkorn@aol.com (973) 365-2757

Members-at-Large:
Naz Simonelli
Richard Tax

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 Milton Korn (973) 365-2757, miltonkorn@aol.com.

HP VoIP/FoIP Testing Seminar

On September 16, 1999, Hewlett Packard will host a free Voice Over IP / Fax Over IP Seminar.

About the Talk

This talk on Voice Over IP / Fax Over IP will be Internet Advisor / FaxTrace Protocol Analyzer focused. A test/troubleshooting tool such as the Internet Advisor or Telegra FaxTrace is critical in today's high speed networks which incorporate data, voice, and fax traffic. First, this seminar will give a primer on Voice Over IP / Fax Over IP networks followed by a demonstration of the VoIP decode capabilities on the Internet Advisor and the FoIP decode capabilities with Telegra FaxTrace Software.

Registration Required!

To register, Contact Pam Weber at pam_weber@hp.com or (630) 245-3180. Clearly state you would like to register for the Paramus Seminar and you were invited via IEEE.

Time: 8:30 AM - 12:00 PM, Thursday, September 16, 1999.
Place: Hewlett Packard, West 120 Century Road, Paramus, NJ. See http://www.hp.com/education/edu-centers/tranewpar.html for directions.
Information: Mike Young at mike_m_young@hp.com or (719) 531-4470.

HP Security Software Seminar

On September 16, 1999, Hewlett Packard will host a free Security Software Seminar.

About the Talk

Learn about risk assessment, attack simulation, intrusion detection, and security management tools that will enable system administrators to stay ahead of hackers (both internal and external) in the race to defend valuable network resources and critical data. A good risk-assessment tool needs to assess well beyond the operating system. It must also assess the applications that store and manage information. In this seminar you will learn techniques recommended by the System Administration, Networking, and Security (SANS) Institute for protecting your information systems from loss and theft. Learn how to close and lock all the windows and doors on your system instantly without interrupting service to your users, and how to provide comprehensive and ongoing protection for you servers.

Registration Required!

To register, Contact Pam Weber at pam_weber@hp.com or (630) 245-3180. Clearly state you would like to register for the Paramus Seminar and you were invited via IEEE.

Time: 1:00 PM - 3:00 PM, Thursday, September 16, 1999.
Place: Hewlett Packard, West 120 Century Road, Paramus, NJ. See http://www.hp.com/education/edu-centers/tranewpar.html for directions.
Information: Mike Young at mike_m_young@hp.com or (719) 531-4470.

IEEE Seeks Third Millennium Medal Nominees

The IEEE has established a new Institute-wide medals program to mark the new millennium and honor members who have been selected by their societies, sections or major boards for outstanding contributions.

We will be participating in the program and ask your assistance in identifying qualified North Jersey members for section level nominations. The selection criteria for nominees at the section level is "for outstanding service to the Section, the Chapter or the engineering community." Our Section can submit 17 nominations and four alternates.

Each section nomination must include the following information: Name, Mailing Address, Phone Number, IEEE Member Number and a one page narrative describing the contributions of the nominee in meeting the Section level selection criteria. It would also be helpful to provide the nominee's Email address and fax number.

All North Jersey Section Nominations must be received by Ken Oexle, Awards Chair, by September 10, 1999. They should be mailed to his attention at 11 Deerfield Road, Whippany, NJ 07981. Ken's phone number is (973) 386-1156.

IEEE plans to announce the Millennium Medal recipients in mid November 1999 and the North Jersey Section recipients will be honored at a Section event next year.

North Jersey Section Activities
August 1999

Aug. 4–"NJ Section Executive Committee Meeting" – 7:00 PM, ITT, 100 Kingsland Road, Clifton, NJ. Milton Korn (973) 365-2757 or miltonkorn@aol.com.

Aug. 10-"Non-WWW Internet Services" - NJ Computer Chapter, 7:00 PM, Dialogic Inc, 1515 Route 10 East, Parsippany, NJ. Howard Leach, (973) 540-4485.

Upcoming Meetings

Sept. 1–"NJ Section Executive Committee Meeting" – 7:00 PM, ITT, 100 Kingsland Road, Clifton, NJ. Milton Korn (973) 365-2757 or miltonkorn@aol.com.

Sept. 10 - Deadline for Third Millennium Medal Nominations. Ken Oexle (973) 386-1156.

Sept. 16–"Micro Turbines" – NJ IAS/PES Chapters, 7:00 PM, PSE&G Training Center, Route 1, Edison, NJ. Ken Oexle (973) 386-1156.

Sept. 16-"Voice Over IP / Fax Over IP Seminar" - 8:30 AM, Hewlett Packard, West 120 Century Road, Paramus, NJ. Reservations required. Mike Young at mike_m_young@hp.com or (719) 531-4470.

Sept. 16-"Security Software Seminar" - 1:00 PM, Hewlett Packard, West 120 Century Road, Paramus, NJ. Reservations required. Mike Young at mike_m_young@hp.com or (719) 531-4470.

Sept. 21 - Oct. 21–"Internet Programming/Web Application Development" – North Jersey Section, Tuesday and Thursday Evenings, 10 sessions, 6:30-9:00 PM, GEC Marconi, 150 Parish Drive, Wayne, NJ. Bhanu Chivakula, (973) 751-4879 or Gabe Silberman, (732) 463-6824, silberman@ieee.org.

Sept. 29 - Dec. 8–"Object Oriented C++ Programming" – North Jersey Section, Wednesday Evenings, 10 sessions, 6:30-9:00 PM, GEC-Marconi, 164 Totowa Road, Wayne, NJ. Bhanu Chivakula, (973) 751-4879 or Gabe Silberman, (732) 463-6824, silberman@ieee.org.

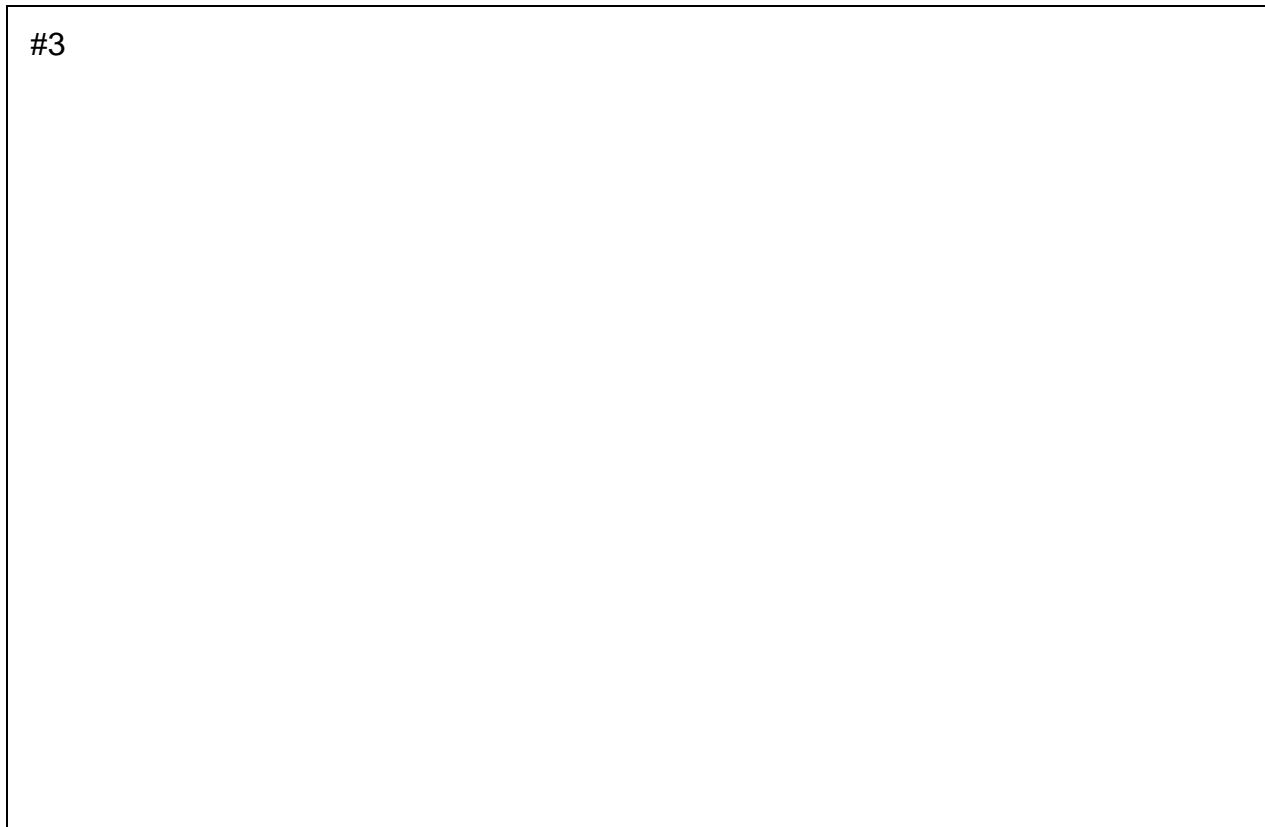## Members and Non-Members Welcome
PLEASE POST

#1

1999 Awards Reception - Honored Guests
From left - Dr. Ira Pitel, Virginia Sulzberger, Amy Galarowicz and Dr. Carl Hsu

#2

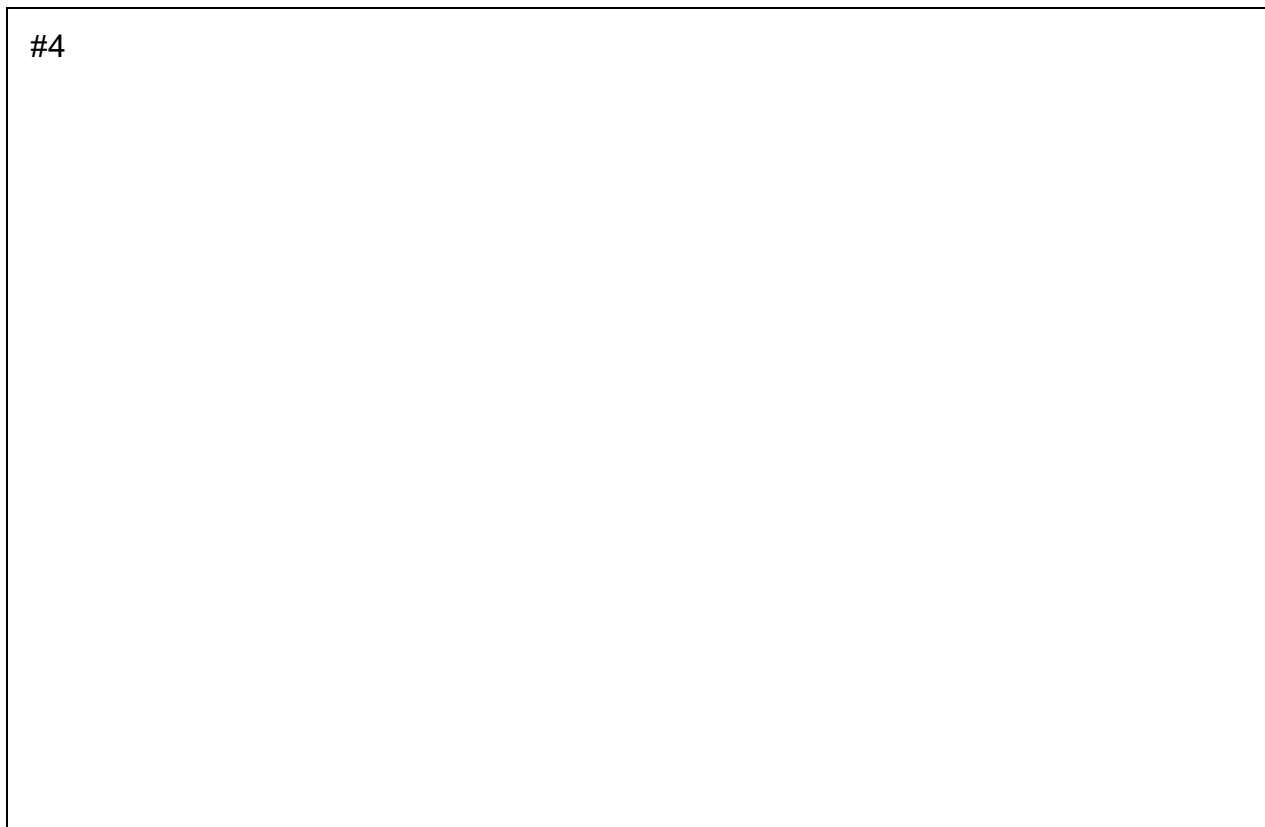**1999 Awards Reception - Past Chairs of the North Jersey Section**

#3

1999 Awards Reception
Howard Leach (right), Past Chair 1989, Congratulates Amy Galarowicz and Amit Patel for Their Goal Accomplishments
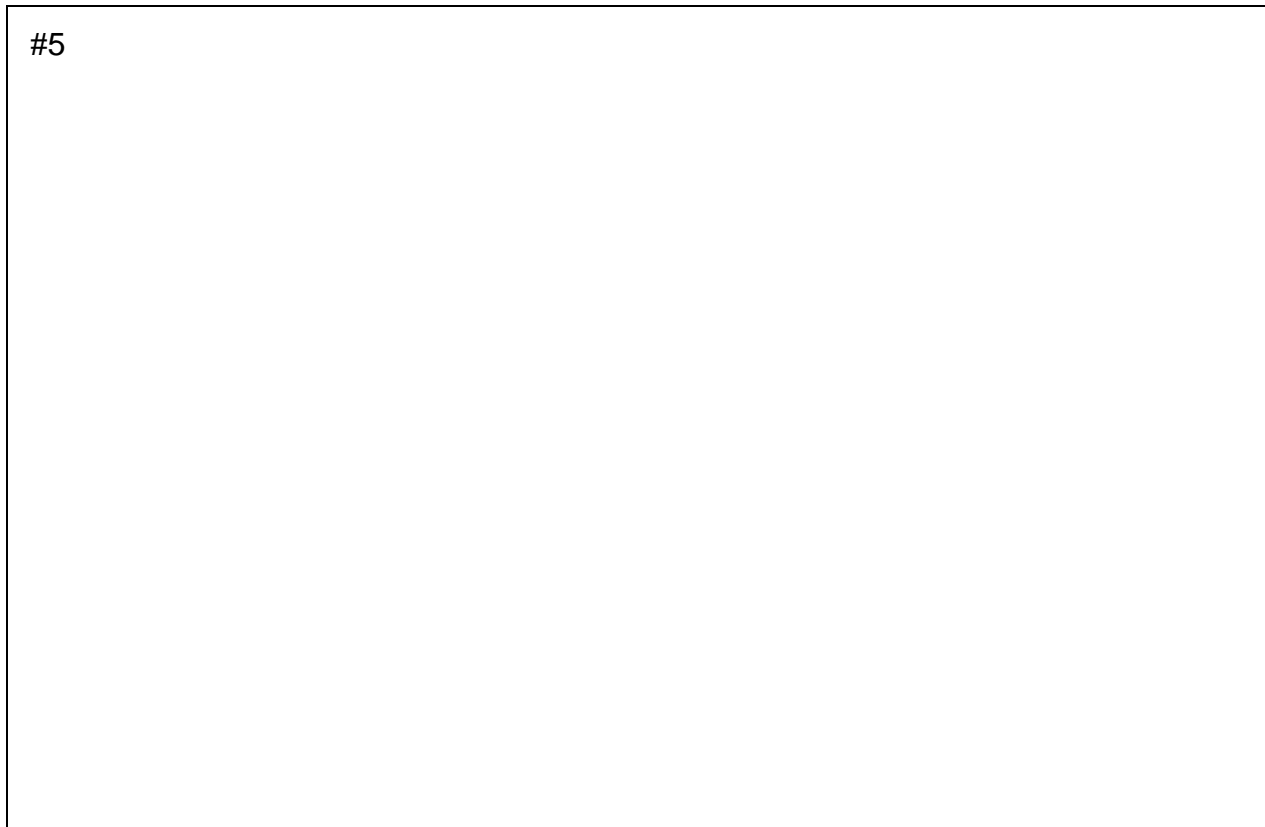
#4

1999 Awards Reception
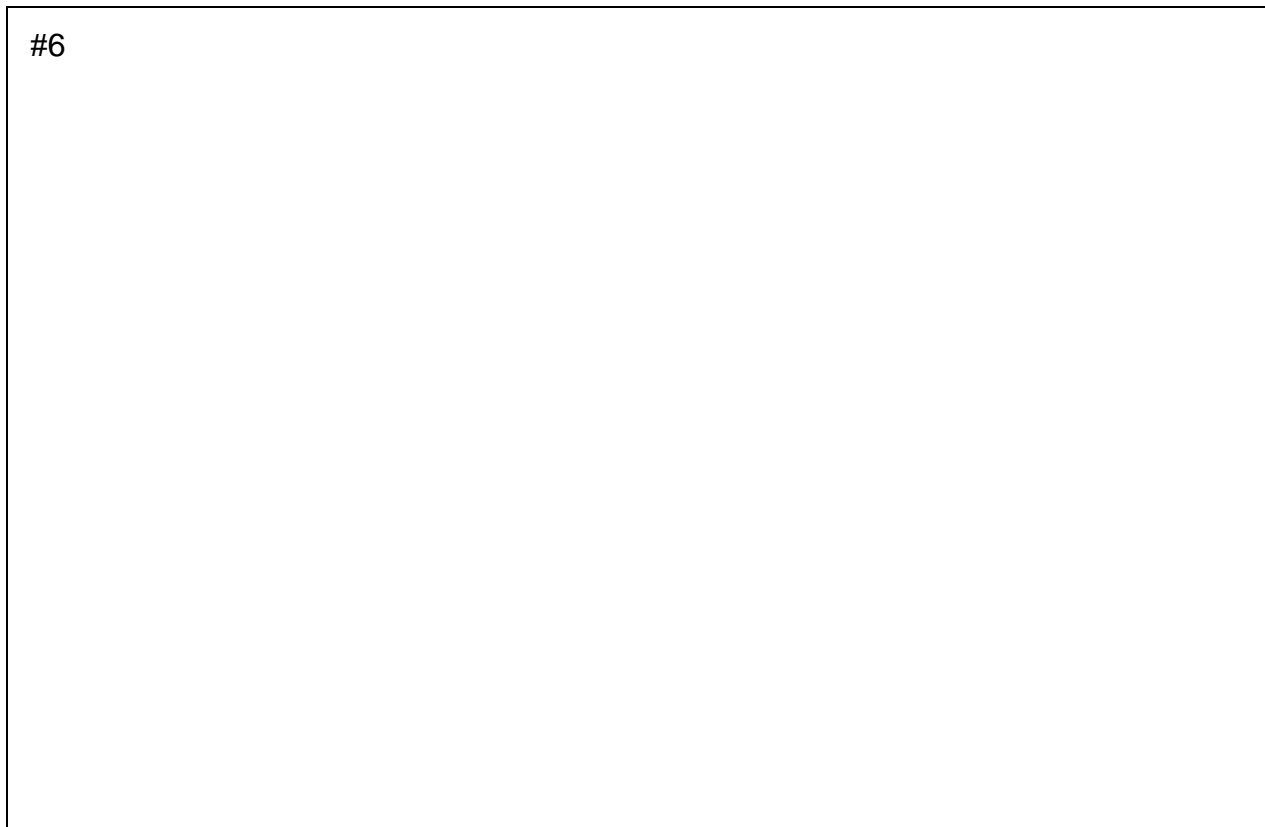New Fellows Dr. Ira Pitel (left) and Dr. Carl Hsu (right)

#5

1999 Awards Reception
Alex Brown (left), Willie Schmidt (center) and Walter Glomb (right)

#6

1999 Awards Reception
Virginia and Carl Sulzberger (left) with New Fellow Dr. Ira Pitel (right)

IEEE North Jersey Section Course
Internet Programming/Web Application Development

Tuesday and Thursday Evenings, September 21 through October 21, 1999
(September 21, 23, 28, 30, October 5, 7, 12, 14, 19, and 21)
GEC Marconi, 150 Parish Drive, Wayne, NJ
(Checks **should not** be mailed to this address)

The IEEE is offering an evening course entitled "Internet Programming/Web Application Development." The course will run for 5 weeks with 2 sessions a week. Each session will run for 2 ½ hours with a short break approximately in the middle.

- Anyone who is interested in developing web sites
- Windows programmers making a transition to Internet technology
- Database personnel wanting to migrate to web development using web servers

TOPICS
- *Fundamentals of Internet/Intranet*
- *HTML (HyperText Markup Language)*
- *FrontPage97/98 and other HTML editors*
- *Extensive use of Graphics/Image tools*
- *Integrate Multimedia in Web Pages*
- *Database Concepts - MS Access and MS SQLServer*
- *Database Integration with Web Applications*
- *Application Development: Introduction to JavaScript & VB Script*
- *Designing an Effective Web Site*

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. Applications postmarked after Sept. 6th will require an additional late fee of $25. No applications accepted after Sept. 10.

WHERE: GEC Marconi, 150 Parish Drive, Wayne, NJ. **(**Checks **should not** be mailed to this address**)**
WHEN: Tuesdays and Thursdays: September 21 through October 21, 1999 - 6:30-9:00 PM
COST: IEEE members $295; Non-members $395
CONTACT: Bhanu Chivakula (973) 751-4879 or Gabe Silberman at (732) 463-6824 or silberman@ieee.org.

REGISTRATION: Internet Programming/Web Application Development

To: Mr. Naz Simonelli, 68 Woodmont Drive, Randolph, NJ 07869-3740 **(Checks should be mailed to this address)**

Name: / Mr. / Mrs. / Miss / Ms. / _____
˅
   Nonmember
˅
   IEEE Member   Member #:_____   Member of _____ technical society

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 17, 1999. 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 & payment are received.

˅
   Tuition receipt will be mailed only if this box is checked   Signature:_____

IEEE North Jersey Section Course
Object Oriented C++ Programming

Wednesday Evenings, September 29 – December 8, 1999
(Sept. 29, Oct. 6, 13, 20, 27, Nov. 3, 10, 17, Dec. 1 and 7 - No class Nov. 24 on account of Thanksgiving on 25th)
GEC-Marconi, 164 Totowa Road, Wayne, NJ
(Checks should not be mailed to this address)

The North Jersey Section IEEE is offering an evening course entitled "Object-Oriented C++ Programming." The Object-Oriented concept is very widely used today in new design and programming work. Instead of focusing on functionality (what the programs do) it focuses on the natural objects comprising the problem and how they, and their capabilities, are modeled in the program.

C++ is the most widely used language today for object-oriented design and programming. But O-O programming is still programming, so the course will begin with the elements of procedural programs and using C++ as a better C language. It will then move on to Object-oriented programming. The course will cover concepts, implementation and practical aspects of using C++ code.

A knowledge of C programming is not necessary to take the course, but, because neither C nor C++ are elementary programming languages, a familiarity with foundation programming concepts will be very helpful.

TOPICS

1. Review common elements of C and C++: punctuation and key words, variable naming, typing and scope, libraries, text strings, arrays, structures and pointers.
2. C++ procedural programs: conditionals and logical variables, looping and testing, subfunctions and arguments. Debugging.
3. Concept of Object-Orientation: objects and classes of objects, methods and messages, encapsulation and abstraction, overloading of functions and operators, inheritance and polymorphism.
4. C++ improvements to C: new commands and operators, comments, stream I/O. function prototypes, more explicit typing and linking.
5. C++ implementation of objects: what is a C++ object, data and method functions within an object, public, private and friend, static and dynamic objects, constructors and destructors.
6. Encapsulation and abstraction within C++ objects: references and aliases, scope control operator, 'this' object, overloading, functions, operators.
7. Inheritance and polymorphism among C++ objects: parent class or object, extending classes, redefining object data and methods, multiple inheritance.
8. C++ I/O streams: standard I/O, formatted I/O with manipulators, disk and device I/O.
9. C++ library classes and their use: characteristics of a good library class, conversion base classes, video base classes, window base classes, database base classes.
10. Overall program structure with C++ objects: how to lay out a C++ program, how to reuse classes in a program, how to test and evolve a C++ program, how to find errors and debug C++ object programs.
11. Other topics: object-oriented design methodologies, templates and the standard template library, namespaces and interactive program design. Object programs in the Windows environment. Evolution of C++. Commonality and differences with Java.

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 Sept. 10 will require a late fee of $25. No reservations will be accepted after Sept. 17th.

WHERE: GEC-Marconi, 164 Totowa Road, Wayne, NJ.
WHEN: 10 Sessions, Wednesdays, September 29 through December 8, 1999, 6:30-9:00 PM.
COST: With text book only: IEEE members $285; Non-IEEE members $395.
CONTACT: Bhanu Chivakula (973) 751-4879 or Gabe Silberman at silberman@ieee.org.

REGISTRATION: OBJECT-ORIENTED C++ PROGRAMMING

To: Mr. Naz Simonelli, 68 Woodmont Drive, Randolph, NJ 07869-3740 **(Checks should be mailed to this address)**

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

⌄ Nonmember

⌄ IEEE Member   Member #:_____   Member of _____ technical society

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 Sept. 17, 1999. 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 & payment are received.

⌄ Tuition receipt will be mailed only if this box is checked   Signature:_____