# IEEE Newsletter

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

NJ Section PACE & GOLD:

# **Engineers Meet:**Where Do We Go From Here? Setting the Fall meeting agenda

On Wednesday, August 9, 2006 the North Jersey Section Professional Activities Committee and Graduates of the Last Decade will meet to discuss the direction of PACE and GOLD committees and their meeting subjects.

#### **About the Meeting**

This meeting is about getting feedback from the Section membership to offer guidance and direction for coming meetings. Basically we are to hold a brainstorming session. All are invited. We shall encourage North Jersey Section Ex-Com officers to attend. When they do, our Section membership will have an opportunity to meet with them on a first name basis.

Bring your associates and spouses.

#### **About the Speaker**

Everyone will have an opportunity to express their views and the meeting will be moderated by the PACE officers.

#### **All Welcome**

Members and students from all professional societies and engineering disciplines are welcome. We now have attendees from IEEE, ASME, and AEA. For information about these groups see:

www.ieeeusa.org http://web.njit.edu/~ieeenj/ www.asme.org/sections/northjersey

**Time:** 6:30 to 9:00 PM, Wednesday, August 9, 2006. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500. Information: Paul Ward, (973) 790-1625 (PWard1130 "AT" aol.com) or Richard F. Tax, (201) 664-0803 (rftax "AT" verizon.net).

# IEEE COMSOC Technical Subcommittee on Cognitive Networks (TCCN)

TCCN http://www.eecs.ucf.edu/tccn/ is a newly established COMSOC technical subcommittee which sponsors conference sessions, workshops, tutorials, and special issues in all aspects of cognitive networks. Dissemination of information about international standards and policies on cognitive networks is also part of the charter. The technical content of these activities focuses on the theoretical performance aspects. analysis. implementation. application. standardization of many diverse topics that include spectrum agile networks, cognitive radio design, software radio, and adaptive intelligent networks, economics cognitive of network technologies, policy and standardization Other technical committees, issues. which define and implement the technical directions of the IEEE Communications Society. can be found http://www.comsoc.org/socstr/org/operati on/techcom/committees.html.

# Interested in Being a North Jersey Section Officer?

The North Jersey Section Nominating Committee will soon begin to consider candidates for section officers for next year. We request that those who are interested in a section office submit their name, office sought, and qualifications to the Committee Chair, Dr. Fred Chichester, by mail at

56 Gordonhurst Ave Upper Montclair, NJ 07043

For further information, you may telephone him at (973) 744-7340 between the hours of 8:00 AM and 9:00 PM.

#### August 2006 Volume 53, Number 1

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. Periodicalsclass 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).

#### **NEWSLETTER STAFF**

Editor	Keith Saracinello
Business Manager	Keith Saracinello
k.saracinello "AT" iee	e.org (908) 791-4067

**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.

#### **SECTION OFFICERS**

Chair Har Dayal
har.dayal "AT" baesystems.com (973) 633-4618
Vice-Chair-1 Bhanu Chivukula
b.chivukula "AT" computer.org (732) 718-3818
Vice-Chair-2Kirit Dixit
kdixit "AT" ieee.org (201) 669-7599
Treasurer Dr. Sanghoon Shin
s.shin "AT" ieee.org (973) 492-1207 Ext. 22
SecretarySeth Jakel
sgjakel "AT" comcast.net (973) 731-1902

Members-at-Large:

Pete Donegan (doneganp "AT" ieee.org)
Amit Patel (a.j.patel "AT" 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 Seth Jakel at (973) 731 1902, sgjakel "AT" comcast.net.

NJ PES/IAS Chapters:

# **Energy Conservation Series - Power Factor Correction**

On September 20, 2006, as part of an ongoing series of free seminars on the topic of energy conservation, the PES and IAS Chapters will sponsor an evening discussion on energy savings associated with power factor correction by Ronald W. Quade. PE.

#### **About the Meeting**

The seminar will provide the basics of power factor correction:

- What is Power Factor?
- Should I Be Concerned About Low Power Factor?
- What Can I Do to Improve Power Factor?
- How Much Can I Save by Installing Power Capacitors?
- How Can I Select the Right Capacitors for My Specific Application Needs?
- How Much kVAR Do I Need?
- Where Should I Install Capacitors in My Plant Distribution System?
- Can Capacitors Be Used in Non-Linear, Non-Sinusoidal Environments?
- What About Maintenance?

#### About the Speaker

Ron Quade, PE, is an Industrial and Utility Sales Manager for Eaton Electrical, a manufacturer of electrical equipment. He has a BS in Electrical Engineering from Rutgers University and an MS in Power Engineering from New Jersey Institute of Technology. He is also a registered professional engineer in the State of NJ. His prior experience includes Power Quality Engineer with Jersey Central Power and Light and consulting engineering with Burns & Roe Industrial Services Company.

**Time:** 6:30 PM, Wednesday, September 20, 2006. A pre-meeting buffet will be available starting at 6:00PM.

**Place:** Eaton Electrical (Cutler-Hammer), 690 Rahway Ave, Union, NJ. Directions: Route 82 Morris Avenue from either Springfield or Union to Rahway Ave.

**Information:** Ronald W. Quade, PE, (732) 205-2614 or rwquade "AT" ieee.org.

NJ Section GOLD:

#### North Jersey GOLD Sponsors Xilinx ISE Design and FPGA Implementation Workshop

The North Jersey Section GOLD (Graduates of the Last Decade) Committee in conjunction with the FDU IEEE Student Branch Teaneck, NJ, will be co-sponsoring a technical workshop on Xilinx ISE design and FPGA implementation.

The workshop provides an excellent opportunity to all students preparing to enter into the workforce or those graduates already working to gain some new skills to propel forward in their current jobs or help prepare for changing and upgrading their current career track.

The purpose of the workshop is to teach participants how to use Xilinx FPGAs and the ISE development kit to implement digital logic and designs. This is a critical skill in the fast-changing world of semi-conductors and just-in-time manufacture of new embedded devices.

Each participant will also receive a 30-page workbook with instructions and labs to take home with them as a future technical reference. Due to using lab equipment, seats are very limited and reservations will be made on a first-registered basis. There is also free and discounted seating reserved for FDU students and IEEE members. All the details of registration and costs can be found on the North Jersey GOLD website http://ewh.ieee.org/r1/north\_jersey/gold or feel free to email the organizer at northjerseygold "AT" ieee.org.

**Time:** 10:30 AM – 4:00 PM, Saturday, September 30, 2006. Free lunch will be provided to all participants during the workshop.

**Place:** Muscurell Building, Rm 207, Fairleigh Dickinson University, Teaneck, NJ. Free parking is available outside the building

**Information:** See http://ewh.ieee.org/r1/north\_jersey/gold or email Amit Patel at northjerseygold "AT" ieee.org.

#### IEEE North Jersey Section Activities August 2006

- **Aug. 2** "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Seth Jakel at sgjakel "AT" comcast.net.
- **Aug. 9** "Engineers Meet: Where Do We Go From Here? Setting the Fall meeting agenda", NJ PACE & GOLD, 6:30 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625 (PWard1130 "AT" aol.com) or Richard F. Tax, (201) 664-6954 (rtax "AT" verizon.net).

#### **Upcoming Meetings**

- **Sep. 6** "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Seth Jakel at sgjakel "AT" comcast.net.
- **Sep. 13** "Partitioning QoS Management for Secure Tactical Wireless Ad-hoc Networks" by Dr. George F. Elmasry, NJ SP Chapter, 4:45PM (pizza at 4:30 PM), New Jersey Institute of Technology (NJIT), Weston Lecture Hall 1, Newark, NJ. Dr. Yun Shi (973) 596-3501 (shi "AT" njit.edu), Dr. Alfredo Tan (201) 692-2347 (tan "AT" mailbox.fdu.edu), Dr. Hong Man (201) 216-5038 (hman "AT" stevens-tech.edu).
- **Sep. 16-Dec. 2** "C# .NET Programming" by Dr. Donald Hsu, North Jersey Section, Saturday Mornings, 10 sessions, 9:00 AM-12:00 PM, Avtech, 130 Clinton Road, Second Floor, Fairfield, NJ. Donald Hsu (yanyou "AT" hotmail.com).
- **Sep. 20** "Energy Conservation Series Power Factor Correction" by Ron Quade, PE, NJ IAS/PES Chapters, 6:30 PM, Eaton Electrical (Cutler-Hammer), 690 Rahway Ave, Union, NJ. Ronald W. Quade, PE, (732) 205-2614 or rwquade "AT" ieee.org
- **Sep. 20** "Wireless Sensor Networks" by Dr. Martin Haenggi, NJ EDS/C&S Chapters, 7:00 PM (buffet at 6:15 PM), New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).
- **Sep. 28** "National Instruments "that GPIB Company"" by Jeff Steele, 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.
- **Sep. 30** "Xilinx ISE Design and FPGA Implementation Workshop", NJ GOLD, 10:30 AM 4:00 PM, Muscurell Building, Rm 207, Fairleigh Dickinson University, Teaneck, NJ. See http://ewh.ieee.org/r1/ north\_jersey/gold or email Amit Patel at northjerseygold "AT" ieee.org.
- Oct. 5 "2006 MTT/AP Symposium and Mini-Show" MTT-S/AP-S Chapter, 9:30 AM 4:30 PM, Birchwood Manor, 111 N. Jefferson Road, Whippany, NJ. Kirit Dixit (201) 669-7599 (kdixit "AT" ieee.org), Art Greenberg (973) 386-6673 (ahg1 "AT" lucent.com), Har Dayal (973) 633-4618 (har.dayal "AT" baesystems.com), or George Kannell (973) 386-4170 (gkk "AT" lucent.com).
- **Oct.** 17 "Chip-Package Co-Design of RF Microsystems" by Professor P.R. Mukund, NJ EDS/C&S Chapters, 7:00 PM (buffet at 6:15 PM), New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).
- Oct. 17-Dec. 5 "Project Management" by Dr. Donald Hsu, North Jersey Section, Tuesday Evenings, 8 sessions, 6:30-9:00 PM, NJ International Bulk Mail Center, 80 County Rd, Jersey City, NJ. Donald Hsu (yanyou "AT" hotmail.com).
- Oct. 27 "National Electrical Code Seminar" by Won Kim, NJ PES/IAS, 9:00 AM 12:45 PM, Jersey Central Power & Light Company, 300 Madison Avenue, Morristown, NJ 07962. Ronald W. Quade (732) 205-2614 or RWQuade "AT" IEEE.org.
- **Nov. 2** "Life Grade Luncheon" 11:30 AM, Hamilton Park Conference Center, 175 Park Ave, Florham Park, NJ. Ken Oexle (973) 386-1156.
- **Nov. 8** "Theory and Applications of SEM/FIB DualBeam Instrumentation" by Dr. Lucille A. Giannuzzi, EDS/C&S Chapters, 7:00 PM (buffet at 6:15 PM), New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).
- **Dec. 18-21** "9<sup>th</sup> International Conference on Information Technology (CIT 2006)", see http://www.citconference.org and http://www.cs.unt.edu/~smohanty/CIT2006.

## Members and Non-Members Welcome PLEASE POST

### 2006 Awards Banquet



North Jersey Section Chair - Har Dayal welcomes distinguished guests and Award Recipients

Newly Elected IEEE Fellow - Dr. Tin Ho





Anne Giedlinski and IAS/Awards Chair Ken Oexle



NJ Section PES Chair - Ronald Quade (middle) presents a check to PES Region 1 Chapter Representative - Roland Dixon (left) and PES Region 1, 2, & 3 Chapter Representative Mike Miller (right).

Left to right: Region 1 Area B Chair - Dr. Gerhard Franz, Newly Elected IEEE Fellow - Dr. Tin Ho, and North Jersey Section Chair - Har Dayal





Left to right: Region 1 Area B Chair - Dr.
Gerhard Franz, Award Recipients
Richard Tax, Dr. Clark DeHaven, Joe Tarallo,
Bhanu Chivukula, Dr. Tin Ho, Howard Leach,
Keith Saracinello, John Baka, and North Jersey
Section Chair - Har Dayal

NJ SP Chapter:

#### Partitioning QoS Management for Secure Tactical Wireless Adhoc Networks

On September 13, 2006, the IEEE North Jersey Section Signal Processing Society along with NJIT will host a seminar on " Partitioning QoS Management for Secure Tactical Wireless Ad-hoc Networks." The speaker will be Dr. George F. Elmasry.

#### **About the Talk**

Addressing Quality of Service (QoS) in military wireless ad-hoc communication networks involves unique challenges due to imposed tactical requirements and conditions, such as heterogeneous traffic with stringent real-time and survivability requirements, mobile wireless nodes in hostile environments, and limited spectrum availability. Encryption adds another layer of complexity because the partitioning of the network into plain text (unencrypted) and cipher text (encrypted) parts that, by definition, cannot communicate QoS information to one another. A typical communication shelter consists of a number of unencrypted LANs connected to a packet-encrypted backbone network. This talk presents a partitioned QoS approach focusing on QoS management at the unencrypted LANs that complements QoS management done at the encrypted backbone. Some of the outlined QoS techniques for unencrypted LANs were used for Warfighter Information Network-Tactical (the future army tactical backbone network).

#### **About the Speaker**

George F. Elmasry received his BSc degree in Electrical Engineering from Alexandria University, Egypt, and his MS and PhD degrees in Electrical Engineering from NJIT. He currently heads the Networking Communications Division at DSCI with a focus on the Future Combat System (FCS) tactical networks for the US Army. The FCS is composed of multiple mobile with networks hierarchical Before joining DSCI, he architecture. worked for General Dynamics C4S in the Warfighter Information Network-Tactical (WIN-T) group where he spearheaded research in the areas of resource management and capacity analysis for WIN-T which is the tactical core network for the US Army. Prior to General Dynamics, he worked for Technologies in the Wireless Networks Wideband CDMA group. His research interests include the areas of wireless networking, ARQ, joint source and

channel coding, and multidimensional interleaving. He holds over 35 publications and patents in these fields. He is also actively involved with technology conference organization and paper reviews.

**Time:** 4:45 PM (refreshments and pizza available at 4:30 PM), Wednesday, September 13, 2006.

Place: New Jersey Institute of Technology (NJIT), Weston Lecture Hall 1, Newark, NJ. Directions are available at http://www.njit.edu/University/Directions.html.

Information: Dr. Yun Shi (973) 596-3501 (shi "AT" njit.edu), Dr. Alfredo Tan (201) 692-2347 (tan "AT" mailbox.fdu.edu), Dr. Hong Man (201) 216-5038 (hman "AT" stevens-tech.edu).

#### NJ EDS/C&S Chapters:

#### Wireless Sensor Networks

On September 20, 2006, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "Wireless Sensor Networks: A New Paradigm for Ubiquitous Sensing and Information Processing." The speaker will be Dr. Martin Haenggi.

#### **About the Talk**

Due to the advances in wireless communications and electronics in recent years, the development of networks of low-cost, low-power, and multifunctional increasing has received sensors attention. These sensors gather and process data, and communicate with each other over a wireless channel. Various hardware platforms have already been designed to test the many ideas spawned by the research community and to implement applications in many fields of science and technology. presentation gives a general introduction to sensor networks. We will discuss their properties, emphasizing the differences to other types of wireless networks, including WLANs and ad hoc networks. An overview of existing hardware solutions for sensor networks will be given, and we will conclude by discussing future directions and developments.

#### About the Speaker

Martin Haenggi received the Dipl. Ing. (MSc) degree in electrical engineering from the Swiss Federal Institute of Technology (ETH) in 1995. In 1995, he joined the Signal and Information Processing Laboratory at ETH as a Teaching and Research Assistant. Between 1996 and 1998, he continued his studies and earned the Dipl. NDS ETH (post-diploma) degree in information

technology. In 1999, he completed his PhD thesis on the analysis, design, and optimization of cellular neural networks. After a postdoctoral year at the Electronics Research Laboratory at the University of California in Berkeley, he joined the faculty of the electrical engineering department at the University of Notre Dame as an assistant professor in January 2001. He is a senior member of the IEEE, a professional member of the ACM and the ASEE (American Society for Engineering Education), and a reviewer for numerous international journals and conferences. Recently he joined the Editorial Board of the Elsevier Journal of Ad Hoc Networks. For both his MSc and his PhD theses, he was awarded the ETH medal, and he received an NSF CAREER award in 2005. His scientific interests networking, include wireless communications, and dynamical systems, with an emphasis on ad hoc and sensor networks. His publications include 3 book chapters, 21 journal publications, and 36 conference papers.

#### All Welcome!

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

**Time:** 7:00 PM, Wednesday, September 20, 2006. Free buffet will be starting at 6:15 PM.

**Place:** New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at http://www.njit.edu.

**Information:** Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).



NJ Consultants' Network:

## National Instruments – "that GPIB Company"

On Thursday, September 28, 2006, the IEEE Consultants' Network of Northern NJ is pleased to present "National Instruments – "that GPIB Company", by Jeff Steele.

#### **About the Talk**

The IEEE CNNNJ has invited Jeff Steele, National Instruments, to emcee the feature presentation for our September meeting, and we invite everyone to come to this special event!

- Who is National Instruments?
- What problems can they help you solve?

Depending on when you have looked at National Instruments you might say "They're that GPIB Company" or "They make LabVIEW"". Traditionally, National Instruments has been a Test & Automation company, but they have been expanding their capabilities to assist engineers in solving control and design

problems. NI continues to expand the computing platforms that its development environments can target to include mobile, industrial, and embedded targets. NI also continues to expand its own hardware platforms for test, control and design.

Jeff, together with NI engineers, will be discussing and demonstrating NI's various development environments and will show some NI's hardware platforms, including FPGA-based PLCs, PC-based RF instruments, USB-based data acquisition plus others. Some of these platforms help engineers do rapid prototyping, hence decreasing time to market. Other platforms might make sense embedded into OEM products, helping to lower development costs.

#### **About the Speaker**

Jeff Steele has worked for National Instruments for over 17 years. He is currently the local Area Sales Manager; he has had various other positions at NI before this. Prior to working for NI, he was employed by Gould Electronics and Westinghouse Electric. He graduated

from Clarkson University in 1984 with a BSEE degree.

#### 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!

Everyone welcome. No registration needed. Free admission.

**Time:** 7:30 PM, Thursday, September 28, 2006.

**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.

# ADVANCE YOUR CAREER WITH A MASTER'S DEGREE FROM POLYTECHNIC UNIVERSITY



#### **GRADUATE PROGRAMS IN:**

- Computer Engineering
- Computer Science
- Electrical Engineering
- Electrophysics
- Management
- RF/Microwaves
- Systems Engineering
- Systems Integration
- · Telecommunication Networks
- · Wireless Innovation

#### JOIN US FOR A GRADUATE INFORMATION SESSIONS IN AUGUST

#### LEARN MORE ABOUT STARTING YOUR MASTER'S DEGREE IN THE FALL:

WESTCHESTER GRADUATE CENTER 40 Saw Mill River Road, Hawthome, NY Tuesday, August 15th, 5-7:30pm (Information Systems Engineering 6-7:30 pm)

Management of Technology Thursday, August 17th, 6-7:30pm

BROOKLYN METROTECH CAMPUS 6 Metrotech Center, Brooklyn, NY Wednesday, August 16th, 5-7:30pm

LONG ISLAND GRADUATE CENTER 105 Maxess Road, Ste N201, Melville, NY Thursday, August 17, 5-7:30pm (Systems Integration 6-7:30 pm)

MANHATTAN GRADUATE CENTER 55 Broad Street, NYC

Wednesday, August 16th, 6-7:30pm

- · Management of Technology
- Telecommunications & Information Management

#### FOR MORE INFORMATION:

Phone: 1-800-POLYTECH Email: gradinfo@poly.edu Online: www.poly.edu/graduate



### IEEE North Jersey Section Course C# .NET Programming

Saturday Mornings, September 16, 2006 through December 2, 2006
Ten weekly classes (September 16, 30, October 7, 14, 21, 28, November 4, 11, 18, December 2, 2006)
Place: Avtech, 130 Clinton Road, Fairfield, NJ
(Checks should not be mailed to this address)

#### IEEE North Jersey Section thanks Avtech for sponsoring this "hands-on" course at its site

The IEEE North Jersey Section is offering a course entitled "C# .NET Programming". Since 2002, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 650+ C# .NET jobs in the New York tri-state area daily! This course will cover the fundamentals of C# language, the .NET framework, window and web-based applications, ADO.NET, ASP.NET, and XML. It will be useful for anyone to develop applications based upon these tools.

You will receive the IEEE Certificate of Completion when you finish the course. Microsoft Corp. has MCAD and MCSD certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course.

Instructor: Donald Hsu, Ph.D., has been a corporate manager for 11 years and is an experienced trainer. Since 2001, he has trained 350+ people in C++, Java, WebLogic, XML, C#.NET courses in 7 organizations.

#### **TOPICS**

1. Compare the enterprise development tools using C++, Java to C# .NET	6. Explain the benefit of using extensible markup language (XML)
2. Define Visual Studio .NET Version 2002 through Version 2005	7. Select database, SQL server, and ADO .NET
3. Identify C# syntax, data type, control structures and common language runtime	8. Choose ASP .NET, web forms, web controls, and web services
4. Distinguish methods, arrays, object-oriented programming	Operate the network, streams-based socket and mobile toolkits
5. Build graphical user interface, multithreading, files and streams	10. Search and sort, data structures, generics and collections
	11. Present student Projects

Class size will be limited to a maximum of 16 with a minimum of 9. Early registration is recommended. Registration accepted after September 3, 2006 will impose a late fee of \$25. No registration will be accepted after September 9, 2006.

WHERE: Avtech Fairfield Campus, 130 Clinton Rd, 2nd Floor, Room B, Fairfield, NJ 07004, (973) 882-8996

(Checks **should not** be mailed to this address)

WHEN: 10 Saturdays, September 16, 30, October 7, 14, 21, 28, November 4, 11, 18, December 2, 2006, 9:00 AM to 12 noon

**COST:** IEEE (& affiliate) members \$475; Non-IEEE members \$550.

CONTACT: Donald Hsu, yanyou "AT" hotmail.com

☐ I wish to receive IEEE Completion Certificate

#### REGISTRATION: C# .NET Programming

Please mail the completed registration form with the Education Committee, IEEE North Jersey Section		
Name: / Mr. / Mrs. / Miss / Ms. /		
☐ Non-member		૧૯ email address ક
☐ IEEE Member	Member of	technical society
Employer:		
Employer Address:		
Home Address:		
Business (day) telephone #:	Home telephone #:	
Please enclose required fee payable to: <b>North Jers</b>	ey Section IEEE	
As soon as a fully completed registration form and status will be mailed after September 9, 2006.	the payment are received, you are officially req	gistered for this course. Registration
☐ Tuition receipt will be mailed only if this box is cl	necked	

Signature:

### IEEE North Jersey Section Course Project Management

Tuesday Evenings, October 17, 2006 through December 5, 2006 Eight weekly classes (October 17, 24, 31, November 7, 14, 21, 28, December 5, 2006) Place: USPS, NJ International Bulk Mail Center,80 County Road, Jersey City, NJ 07097 (Checks should not be mailed to this address)

#### IEEE North Jersey Section appreciates USPS, BMC for sponsoring these courses at their premises

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 3800+ 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 2003 software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

You will receive the IEEE certificate of completion when you finish the 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 from the knowledge you learned in this course. (This is not an exclusive PMP-PMI examination prep course. No PDUs are issued for PMP eligibility. CEU credits would be given by IEEE)

Instructor: **Donald Hsu**, **PhD**, has been a corporate manager for 11 years and is an experienced trainer. Since 1999, he has trained 400+ people in IT Project+, MS Project 2003, and Project Management courses in eight organizations.

**TOPICS** 

1.

2.

Explain the need for a project manager

☐ Tuition receipt will be issued only if this box is checked

Define SOW, PERT, GANTT, CPM, and Scope of the project

	itor project progress ons out Project files to MS Word and combination views ed to Project Server out Projects  a minimum of 10. Early registration is recesservations will be accepted after October 10 orsey City, NJ. (Checks <b>should not</b> be mail ovember 7, 14, 21, 28, December 5, 2006, 6:3 n-IEEE members \$480.	0, 2006. ed to this address)
	SISTRATION: Project Management	
Please mail the registration form with the check Education Committee, IEEE North Jersey Sectio  Name: / Mr. / Mrs. / Miss / Ms. /	n, PO Box 2093, Fort Lee, NJ 07024.	
□ Non-member		∕⊾email address∌
☐ IEEE Member	Member of	technical society
Employer:		
Employer Address:		
. ,		
Home Address:		
Business (day) telephone #:	Home telephone #:	
Please enclose required fee payable to: <b>North Jers</b>	ey Section IEEE	
As soon as a completed registration form and the p will be emailed after October 10, 2006.	ayment are received, you are officially regis	stered for this course. Registration status
☐ I wish to receive the IEEE Completion Certificate	<del>)</del>	

Signature:

"The IEEE Newsletter" - August 2006 - Page 9 NJ

#### NJ Power Engineering Society/Industry Applications Society

#### **National Electric Code Seminar**

The PES and IAS Chapters will sponsor a one-day seminar providing an overview and discussion of recent changes incorporated in the 2005 National Electrical Code (NEC). The session will be held on Friday, October 27<sup>th</sup>, from 9:00 AM – 12:45 PM, in the Punch Bowl Room at Jersey Central Power and Light, 300 Madison Ave, Morristown, NJ. The instructor will be Won Kim, PE. Participants are encouraged to bring their NEC book to the seminar. It can be ordered at www.NFPAcatalog.org (request the current NEC 2005 edition).

#### **About the Seminar**

The National Electrical Code is revised every three years by National Fire Protection Association as NFPA 70, and is adopted by most of the States as the State's Electrical Code. The purpose of the Code is the practical safeguarding of persons and property from hazards arising from the use of electricity. The seminar will cover the major changes in the code, and the topics will include the following:

- ✓ Relationship to Uniform Construction Code of New Jersey and Electrical Safety Code(NESC) published by IEEE.
- ✓ Enforcement of the Code by the Department of Community Affairs (DCA) and the municipalities.
- Relationship between electrical engineers/designers, electrical contractors and electrical inspectors.
- ✓ Wiring methods, materials and protection.
- Equipment for general use.
- ✓ Special occupancies and conditions
- ✓ Communications Systems

The registration fee for this seminar will be \$100 (non-members), \$75 (IEEE members), \$50 IEEE GOLD (Graduates of the Last

Decade) Members, \$25 Student Members and the fee will be waived for Life Members. All Registrations after October 12 must include an additional late fee of \$25. IEEE Continuing Education Units will be available at the seminar for an additional charge.

**Time:** 9:00 AM – 12:45 PM, Friday, October 27, 2006.

Place: Punch Bowl Room at Jersey Central Power and Light, 300 Madison Ave, Morristown, NJ.

Directions: Route 287 to Route 124 (Madison Ave exit). Head toward Madison. Jersey Central building is on the left about

1.5 miles from the exit.

Information: Ken Oexle, (973) 386-1156

\_\_\_\_\_

Registration: National Electric Code Seminar 10/27/2006

Register via US mail to: Kenneth Oexle

11 Deerfield Rd Whippany, NJ 07981

Name			
Address			
Phone	Email		
IEEE #	_ Student @		Life Member
Continuing Education Units:	Yes	No	
Payment Enclosed \$ Add \$25 late registration after October 12, 2006			

Make checks payable to North Jersey Section IEEE

#### Life Grade Luncheon

The PES Chapter and the Section will sponsor a luncheon for North Jersey IEEE Life Grades (Members, Senior Members and Fellows) on Thursday, November 2, at the Hamilton Park Conference Center, 175 Park Avenue, Florham Park, NJ 07932. The luncheon will begin at 11:30 AM in the Terrace area. Cost is \$5.00 per person.

Advance registration is required prior to October 24. We can accommodate only 30 people. Registrations will be processed in the order of receipt and will be confirmed by return mail. Please complete the following registration form and include a check Payable to the North Jersey Section IEEE in the amount of \$5.00 per person.

Reservations cannot be accepted at the door. For additional information contact Ken Oexle 973-386-1156.

IEEE Life G	rade Luncheon Registration NJ -	Nov 2, 2006
Name		
Address		
Phone		
IEEE#	Y	es
Return to:	Ken Oexle 11 Deerfield Rd Whippany, NJ 07981	

Prior to October 24 and enclose \$5.00 Check payable to NJ Section IEEE

#### THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.



#### **IEEE NORTH JERSEY SECTION**

MTT-Society and AP-Society Joint Chapter



**PRESENT** 

#### 21st ANNUAL SYMPOSIUM AND MINI-SHOW



#### FOCUS: SELECTED TOPICS IN RF AND MICROWAVE COMMUNICATION

Thursday, October 5, 2006 Birchwood Manor 111 N. Jefferson Road, Whippany, NJ (973) 887-1414

#### SCHEDULE OF EVENTS

9:30 AM TO 4:30 PM

#### TECHNICAL SESSIONS

10-12 LECTURES FEATURING SPEAKERS FROM LEADING COMPANIES WITH EMPHASIS ON MILTARY ELECTRONICS, WIRELESS TECHNOLOGIES AND MICROWAVE COMMUNICATIONS.

### MINI SHOW FEATURING LATEST PRODUCTS (Approximately 30-40 Exhibitors)

#### **COMPLIMENTARY LUNCH SERVED**

Details of the schedule, speakers and topics can also be found at the IEEE North Jersey Section Newsletter webpage:

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

#### For further information contact

Chair/Exhibition:	Kirit Dixit	(201) 669-7599	kdixit "AT" ieee.org
Publicity:	Arthur Greenberg	(973) 386-6673	ahg1 "AT" lucent.com
Event/Location Coordinator:	Ken Oexle	(973) 386-1156	
Section Chair/Coordinator:	Har Dayal	(973) 633-4618	har.dayal "AT" baesystems.com
Technical Program Chair:	George Kannell	(973) 386-4170	gkk "AT" lucent.com

#### THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW