NJ Section PACE, GOLD:
ENGINEERS MEET:
For a Members Social
On Wednesday, December 13, 2006 the North Jersey Section Professional Activities Committee and Graduates of the Last Decade will meet for a Social, with Pizza, soda & refreshments.

About the Meeting
This meeting is about getting members of the Section together for a light evening of discussion and hospitality. Basically we can hold a brainstorming session to discuss future meetings and activities. 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, friends and spouses.

About the Speaker
Everyone will have an opportunity to express their views about the profession, jobs and opportunities.

All Welcome
Members and students from other professional societies and engineering disciplines are always welcome. We now include members from IEEE, ASME and AEA. For more information about these groups see:

www.aea.org
www.ieeeusa.org
http://web.njit.edu/~ieeenj/
www.asme.org/sections/northjersey
http://ewh.ieee.org/reg/1/

Time: 6:30 to 9:00 PM, Wednesday, December 13, 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).

NJ Consultants’ Network:
PSoC Mixed Signal Development
On Thursday, January 25, 2007, the IEEE Consultants’ Network of Northern NJ is pleased to present “PSoC Mixed Signal Development”, by Chris Mesibov.

About the Talk
CNINNJ is pleased to present a technical presentation about Cypress PSoC (Programmable System on Chip) mixed signal IC development. Since its introduction, the Cypress PSoC has made dramatic inroads into embedded systems as a versatile mixed signal microcontroller. The PSoC contains microcontroller, digital and analog functions that provide an embedded engineer a vast set of solution all within a single IC. The discussion will describe what functions can be provided, how they are implemented, why engineers are choosing the PSoC over other micro controllers, and how the PSoC is used. Application examples are examined and demonstrations of the software tools are given that provide insight into the powerful features and development environment available to the PSoC developer.

About the Speaker
Chris Mesibov is President of TechGenesis Inc. His consulting business provides analog and digital design services and specializes in PSoC development. Mr. Mesibov is a Cypress PSoC certified designer/developer and has 20+ years experience designing embedded systems for RF ATE systems for military avionics, cellular / satellite equipment, and power systems for telecom products. His website is http://www.techgenesis1.com and can be reached by email at chris “AT” techgenesis1.com or by phone at (914) 584-2659.

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.


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.
**December 2006**  
**Volume 53, Number 6**  
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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, 26 Messenger Lk, Ringoess, NJ 08851, (302) 683-7162.

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**ABOUT THE SPEAKER**

**Greg Ratta** is a Licensed Professional Engineer, knowledgeable about voice and data network communication protocols, technologies and services. He is an experienced systems engineer – a problem solver, who has provided consulting services to manufacturers and service providers in the telecom and cable industries as well as to government agencies within DHS and DoJ. His background in hardware design, software development, systems analysis, network planning and operational methods has allowed him to be an effective facilitator for his clients in the planning and delivery of business systems and networking solutions to satisfy business objectives and ongoing operations. He can be reached by email at greg.ratta “AT” verizon.net or by phone at (732) 530-1874.

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**FIRST LEGO Judges Needed**

The FIRST (For Inspiration and Recognition of Science and Technology) is sponsoring the FIRST LEGO League Nano Quest. This year they will be holding a competition in Montclair at Mt Hebron School on Saturday, December 2, 2006 from 9 AM to 2 PM.

The FIRST organization is seeking judges for this competition. You can check out the details at http://www.firstlegoleague.org/default.asp?xpid=21380

If you are interested in judging, please contact Harvey Morgininst at harvey.morgininst “AT” excite.com.

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**NJ Consultants’ Network:**

**Building the Foundation For a Successful Consultant Marketing Plan**

On Thursday, February 22, 2007, the IEEE Consultants’ Network of Northern NJ is pleased to present "Building the Foundation For a Successful Consultant Marketing Plan", by Greg Ratta.

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**PES/IAS Leadership Openings**

The PES and IAS Chapters are seeking members who are willing to serve in leadership and officer position in these Chapters. Interested candidates should contact Ken Oexle at (973) 386-1156 for more information.

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**The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Seth Jakel at (973) 731 1902, sgjakel “AT” comcast.net.**
IEEE North Jersey Section Activities
December 2006


Dec. 13 – “Minter Electronic Aircraft Safety Warning System” by Jerry B. Minter, NJ AESS Chapter, 7:00 PM (free buffet starts at 6:00 PM), Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, 07960, (973) 285-6930. Dr. Naresh Chand, (973) 636-7408, naresh.chand “AT” baesystems.com, or Howard Leach, (973) 540-1283, h.leach “AT” ieee.org.


Upcoming Meetings

Jan. 3 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Seth Jakel at sgiakel “AT” comcast.net.


Feb. 17-Apr. 28 – “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).


Mar. 14-May. 9 – “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).


Members and Non-Members Welcome

PLEASE POST
NJ AESS Chapter:

Minter Electronic Aircraft Safety Warning System

On Wednesday, December 13, 2006, the North Jersey Chapter of the IEEE Aerospace & Electronic Systems Society together with the Lone Eagle Composite Squadron of the Civil Air Patrol will sponsor a talk entitled ‘Minter Electronic Aircraft Safety Warning System’ by Mr. Jerry B. Minter.

About the Talk

The aircraft transponder system in present operation worldwide has some serious limitations as follows:

1. The dependence on barometric pressure to determine relative altitude, and
2. The lack of instant horizontal location of other aircraft transponders.

The following U.S. Parents have been issued covering solutions to the above limitations of the present transponder systems: 5,223,847; 5,506,509; 5,861,846; 5,889,491; 6,097,315; and 6,486,839. The solution uses a multimode antenna system that can locate the relative horizontal direction to another plane within one microsecond after receiving the first transponder pulse.

Lab models of the antenna and audio and visual pilot warning systems indicating the distance to and location of nearby aircraft will be demonstrated using a portable aircraft transponder. Because the system does not generate a radiation signal, no license is required for operation.

About the Speaker

Jerry B. Minter was first employed in 1935 by the Boonton Radio Corporation, NJ, in the development of band-pass intermediate frequency transformers. In 1936 he was involved in the development of aircraft radio receivers at the Radio Frequency Laboratories of Boonton, NJ. During the later part of 1936 he was employed by the Ferris Instrument Corp., NJ, to take charge of several projects including development of a signal generator and a radio noise and field-strength meter.

In 1939, Mr. Minter and some of his associates from Ferris Instrument Corp organized the Measurements Corp of Boonton, NJ, where he became Vice President and Chief Engineer. After much success with design and production of test equipment, the stockholders decided to sell the Measurements Corp. to the Edison Company in 1953. At that time, he had a number of conversations with Charles Edison about his father, Thomas Edison, and dined in the dining room of Edison’s West Orange Laboratory before it was turned over to the National Park Service as a National Historic Site.

In 1954, Mr. Minter bought the Components Corp. and entered into the audio business where he developed a series of special test records. In the 1960’s, the company designed and built miniature high voltage power supplies for use in high altitude probes for NASA. They also developed a high-reliability edgeboard connector called the “DigiKlip” that was used commercially in the Univac 1108, DC-10, as well as in space and military programs.

Mr. Minter also worked on video systems, one within a hospital area to reduce RF interference. In another medical project, he modified VCR’s to reduce their startup time in medical facilities within NYC. His most recent technical innovation is a passive collision warning system for small aircraft. Jerry Minter holds 26 patents of which the last six are on his aircraft collision avoidance system.

He received a BS in EE from MIT in 1934. He organized and chaired the first Northern New Jersey Subsection of the Institute of Radio Engineers (IRE) in 1947. Jerry B. Minter was named a Fellow of the IEEE in 1969 and he became a Life Fellow of the IEEE in 1979. He also is a Fellow and past President of the Radio Club of America. Further, he is also a past President of the Audio Engineering Society and has held memberships in the Radio Electronic Television Manufacturing Association, the Society of Automotive Engineers, the American Standards Association, and the American Society of Metals.

Finally, but not the least of his past activities, Jerry B. Minter was a Senior Member of the Civil Air Patrol and used his own aircraft to conduct CAP search and rescue missions.

All Welcome!

You do not have to be a member of the IEEE or the Civil Air Patrol to attend. The North Jersey Section of the IEEE will sponsor a free buffet starting at 6:00 PM. Come and bring your friends.

Time: 7:00 PM (free buffet starts at 6:00 PM), Wednesday, December 13, 2006.
Information: Dr. Naresh Chand, (973) 636-7408, naresh.chand “AT” baesystems. com, or Howard Leach, (973) 540-1283, h.leach “AT” ieee.org.
“Labor cost is undoubtedly the major factor at present, but offshoring is much more complex than that,” Wyndrum said. “Business is also motivated by such considerations as market access and market development, access to talent, the cost of capital, governmental economic incentives, special or lower cost infrastructures and capabilities (e.g. subsidized telecommunications or Internet), access to universities and research centers, comparative government regulations, and a host of other factors. Even if labor cost-margins narrow, there will still be strong incentives for offshoring.”

Wyndrum’s panel, “Implications for the Engineering Workforce and Profession,” included Richard Freeman, the Herbert S. Ascherman professor of economics at Harvard University; and Vivek Wadhwa, executive-in-residence and adjunct professor at Duke University’s Pratt School of Engineering. Lori Kletzer, professor of economics and department chair at the University of California, Santa Cruz, served as moderator.

Although U.S. engineers cannot guarantee their jobs will not be offshored, Wyndrum recommended mid-career and lifelong education, as well as being innovative and entrepreneurial to remain employed. “It will require a modicum of tough love at times to change engineers’ thinking about their careers,” he said. “And it will take time to affect changes and see the results.”

For more on the workshop, go to http://www.ieeeusa.org/communications/press/residentscolumn/wyndrum/WyndrumNAEOffshoring.pdf

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 220,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world’s largest technical professional society with 360,000 members in 150 countries. See http://www.ieeeusa.org.

Call For Papers

10th Communications and Networking Simulation Symposium (CNS 2007)

As part of Spring Simulation Multiconference 2007 (SpringSim 2007)

Sponsored by:
The Society for Modeling and Simulation International (SCS)

March 26-28, 2007 Norfolk, Virginia, USA

http://www.scs.org/conferences/springsim/springsim07/springsim07.htm

Looking for a Few New Fellows

Nominations are being accepted for the IEEE Fellows class of 2008. The rank of IEEE Fellow is the institute’s highest member grade, bestowed on senior members who have contributed “to the advancement or application of engineering, science, and technology.” The deadline for nominations is 1 March 2007.

Senior members can be nominated in one of four categories: application engineer/practitioner, research engineer/scientist, educator, or technical leader.

To nominate an IEEE senior member or to learn more about the Fellow program, visit http://www.ieee.org/fellows.
CALL FOR PAPERS AND EXHIBITORS

Last year’s successful conference featured contributed papers that were presented in three parallel sessions: Systems, Applications, and Technology. Technical papers describing research development and application on a broad range of electronic and electrical engineering topics are solicited for LISAT2007.

All paper submissions must include title and a 300 to 500 word summary, the speaker(s) full name, affiliation, address, phone number and email address and a 1/3 page long biography. Submissions should be emailed to the LISAT Technical Program Co-Chairmen, Dave Mesecher at d.mesecher@ieee.org and Daniel Rogers at drogers@ieee.org, as well as Jesse Taub, Technical Program Consultant, at jjetaub@aol.com. Papers will be accepted based on their originality, quantitative content, clarity, and interest to IEEE members.

The deadline for paper submissions is December 1, 2006. You will be notified of acceptance or rejection on or before January 10, 2007 and will be given instructions for electronic submission of your full paper which is due by February 15, 2007. One author of each paper must register for the Conference and will be expected to provide a 40 minute PowerPoint presentation at the conference followed by 10 minutes of Q&A. Presented papers will be part of the CD-ROM Conference Proceedings to be given to each attendee and will become part of the IEEE Xplore database.

While LISAT welcomes a wide variety of papers in systems, applications and technology, some examples of topics of particular interest are:
- Homeland Defense, Satellite Communications, Mobile Communications, RF
- ID Tag Technology, Microwave Technology, Electromagnetic Compatibility,
- Mobile Ad Hoc Networking, Multi-level Network Security, Sensor Fusion,
- New Electrical Power Sources, Antenna Systems and Processing, Radio
- Locationing, Radar Systems and Techniques, and Medical Electronics

Releases and Approvals: This conference will be unclassified and attended by both US and non-US persons. It is the author’s responsibility to obtain all required company and government releases and approvals prior to making a paper submission. A statement that such releases and approvals have been obtained as well as a completed IEEE copyright form (signed by the submitting author) must accompany the final manuscript of each accepted paper.

For information on Exhibiting at LISAT, please contact: Fred Kruger at f.m.kruger@ieee.org or Mark Sadick at mark@sahaborind.com and/or Tel: 516-967-2970

For all other information contact LISAT2007 Conference Chair: Dr. Charles Rubenstein at c.rubenstein@ieee.org or Conference Vice Chair: Dr. Babak Beheshti at b.beheshti@ieee.org

LISAT is sponsored by the IEEE Long Island Section and its Technical Society Chapters, and IEEE Region 1 in cooperation with the Institute for Research & Technology Transfer (IRTT) at Farmingdale State University
IEEE North Jersey Section Course
C# .NET Programming

Saturday morning, February 17, 2007 through April 28, 2007
Ten weekly classes (February 17, 24, March 3, 10, 24, 31, April 7, 14, 21, 28, 2007)
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 800+ 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 790+ people in C++, C#.NET, Java, Unix, Visual Basic, WebLogic and XML courses in 10 organizations.

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

WHERE: Avtech, 130 Clinton Road, Second Floor, Fairfield, NJ
WHEN: 10 Saturdays, February 17, 24, March 3, 10, 24, 31, April 7, 14, 21, 28, 2007 from 9:00 AM to 12 Noon
COST: IEEE (& affiliate) members $500; Non-IEEE members $550.
CONTACT: Donald Hsu, yanyou "AT" hotmail.com

REGISTRATION: C# .NET Programming
Please mail the completed registration form with the check (payable to “North Jersey Section IEEE”) to:
Donald Hsu, Co-Chair, Education Committee, IEEE North Jersey Section, P.O. Box 2093, Fort Lee, New Jersey 07024

Name: ___________________________ Email address ___________________________
☐ Non-member
☐ 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

As soon as a fully completed registration form and the payment are received, you are officially registered for this course. Registration status will be notified in an email format.

☐ I wish to receive IEEE Completion Certificate Signature:___________________________________________

“The IEEE Newsletter” – December 2006 - Page 7 NJ
IEEE North Jersey Section Course
Project Management

Wednesday Evening, March 14, 2007 through May 9, 2007
Eight weekly classes (March 14, 21, 28, April 11, 18, 25, May 2, 9, 2007
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 thanks USPS, BMC for sponsoring this course at its site

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 5500+ 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 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, Ph.D., has been a corporate manager for 11 years and is an experienced trainer. Since 1999, he has trained 450 people in IT Project+, MS Project 2003, and Project Management courses in eight 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. Market global e-Commerce projects
11. Present student Projects

WHERE: NJ International Bulk Mail Center, Jersey City, NJ. (Checks should not be mailed to this address)
WHEN: 8 Wednesdays, March 14, 21, 28, April 11, 18, 25, May 2, 9, 2007, from 6:30 to 9:00 PM.
COST: IEEE (& affiliate) members $430; Non-IEEE members $480.
CONTACT: Donald Hsu: yanyou "AT" hotmail.com

REGISTRATION: Project Management

Please mail the registration form with the check (Checks payable to “North Jersey Section IEEE”) to:
Donald Hsu, Co-Chair Education Committee, IEEE North Jersey Section, P. O. Box 2093, Fort Lee, NJ 07024

Name: _____________________________________________ Email address _______________________________

☐ Non-member
☐ 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

As soon as a completed registration form and the payment are received, you are officially registered for this course. Registration status will be emailed to you for confirmation.

☐ I wish to receive the IEEE Completion Certificate Signature:__________________________________________