

The



IEEE Newsletter

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

NJ Section PACE, GOLD, WIE: **Engineers Meet: Learn Ways to Define Your Retirement Goals and Plan to Reach Them in Today's Changing Market**

On Wednesday, January 13, 2010 the North Jersey Section Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will host a meeting to help you define goals and plan for your retirement. Our speakers will be Matthew Niemczyk, Financial Advisor at Ameriprise Financial and TJ Spizzo, CRPC Advanced Financial Advisor at Ameriprise Financial.

About the Meeting

If you're looking for help defining your ideal retirement, along with planning to save and invest for it, then you should attend our informative seminar: **Retirement: Planning Beyond the Numbers®**.

During this complimentary seminar, you'll learn ways to:

- Envision your ideal retirement.
- Build a plan to help you reach your retirement goals, even in a changing economy.
- Position your finances as you plan for a long retirement.

This is an informational seminar, and there's no cost or obligation to attend. Ameriprise Financial is committed to helping you learn more about your options in managing your financial resources and giving you straight forward guidance on personal money management and investment strategies.

You will receive our Dream Book® guide, to help you explore your retirement dreams.

About the Speakers

Matthew Niemczyk received his BS in Business Economics, from the Pennsylvania State University. He has been working in the investment industry for over 7 years and is currently a fully certified financial advisor for Ameriprise Financial. His areas of focus include personal financial planning for retirement, retirement income strategies, education

funding, and investments. He works with his clients to design a personal financial plan based on their life goals. This strategy focuses on helping them become more confident about managing their financial objectives.

TJ Spizzo received his BS in Business and Environmental Economics from Rutgers University. He is currently a fully certified, Advanced Financial Advisor with Ameriprise Financial. TJ has over 12 years experience in the investments industry and currently holds his Chartered Retirement Planning Counselor designation. His area of focus is on personal financial planning for retirement, retirement income strategies, tax management strategies, and protection planning/family security. His mission is to help his clients reach their financial goals through a personal relationship based on personalized, knowledgeable advice. TJ is, also, actively involved in volunteering in the Mahwah Youth Sports Boosters Association.

All Welcome!

Members and students from all professional societies and engineering disciplines are welcome. We now have

attendees from IEEE, ASME, NSPE, ASCE and AEA. For information about these groups see:

www.aea.org
www.ieeeusa.org/policy/care
www.ieeeusa.org
www.programmersguild.org
<http://web.njit.edu/~ieeenj/>
www.asme.org/sections/northjersey

CARE is the Congressional Advocacy Recruitment Effort CARE is a voluntary network of IEEE members who are interested in public policy. To help and for information go to www.ieeeusa.org/policy/care/.

Time: 6:30 PM to 9:00 PM, Wednesday, January 13, 2010. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

Information: Paul Ward, (973) 790-1625, PWARD1130@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209-8607, kduncan@ieee.org.

JANUARY 2010

January 2010

Volume 56, 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).

NEWSLETTER STAFF

Editor..... Keith Saracinello
Business Manager Keith Saracinello
k.saracinello@ieee.org (302) 683-7162

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, (302) 683-7162.

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 Amit Patel
a.j.patel@ieee.org
Vice-Chair-1 Dr. Sanghoon Shin
s.shin@ieee.org (973) 492-1207 Ext. 22
Vice-Chair-2 Dr. Naresh Chand
naresh.chand@baesystems.com (973) 636-7408
Treasurer Vacant
Secretary Russell Pepe
rcpepe@ieee.org (201) 960-6796

Members-at-Large:

Pete Donegan (doneganp@ieee.org)
Dr. Katherine Duncan (kduncan@ieee.org)
Dr. Mengchu Zhou (zhou@njit.edu)

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 Russell Pepe at (201) 960-6796, rcpepe@ieee.org.

NJ Consultants' Network: Make Your Website Your Strongest Sales Channel

On Thursday, January 28, 2010 the IEEE Consultants' Network of Northern NJ (www.TechnologyOnTap.org) will present an information-packed workshop with an online marketing expert from ThomasNet.

About the Topic

This special program will change the way you do business – by using your website as your key sales channel:

Join us and find out how to:

- Hear what engineers/buyers want from your website and how they are searching for your products and services.
- Give your potential customers what they want on your website in terms of content and functionality.
- Get more RFQs, sales inquiries, and new customers who decide to buy from your based solely on what's on your website.

About the Speaker

ThomasNet (www.ThomasNet.com) is the leading online destination connecting industrial sellers and buyers worldwide. ThomasNet also offers proprietary web-based technology to

help industrial businesses increase sales, expand into new markets and improve efficiencies—ultimately succeeding in today's online environment. The company has more than a century of experience in the industrial market, and conducts ongoing research on buyers' and sellers' needs. ThomasNet has helped thousands of clients improve their sites with its Navigator Platform technology, which includes online catalogs, CAD drawings, e-commerce capabilities, content syndication, tracking/analytics, and more.

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!

Free admission – members and non-members are welcome.

Time: 6:00-8:30 PM, Thursday, January 28, 2010.

Place: Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, (973) 285-6930. For directions see www.mclib.info.

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org.

From the North Jersey Section's Education Committee:

Hot courses can enhance your position in the job market

IEEE North Jersey Education Committee ran programming and management courses since 1993. 229 IEEE members and non-members completed these courses. Benefits: Some got jobs at AT&T and Microsoft Corporation.

We need hot courses, instructors and classrooms. If you can teach a hot course (any course that can get people jobs), email your one-page abstract and your resume. If your NJ firm can provide a conference room, evening or Saturday morning, contact Donald Hsu, Chair, yanyou@hotmail.com. Thank-you and act NOW!

IEEE North Jersey Section Activities

January 2010

Jan. 5 – Jan. 14 – “Software Testing and Quality Assurance” by Dr. Piyu Tripathy, 6:30 PM to 9:00 PM, Room: ECEC 202 , NJIT, 161 Warren Street, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Jan. 6 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rcpepe@ieee.org.

Jan. 13 – “Engineers Meet: Learn Ways to Define Your Retirement Goals and Plan to Reach Them in Today’s Changing Market” by Matthew Niemczyk and TJ Spizzo, NJ PACE, GOLD, WIE, 6:30 PM to 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, PWard1130@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209–8607, kduncan@ieee.org.

Jan. 28 – “Make Your Website Your Strongest Sales Channel”, NJ Consultants' Network, 6:00-8:30 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, (973) 285-6930. Contact Robert Walker for information at r.d.walker@ieee.org, (973) 728-0344, or visit the website at www.TechnologyOnTap.org.

Upcoming Meetings

Feb. 3 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rcpepe@ieee.org.

Feb. 10 – “Digital Radiography” by Dr. Lucian A. Kasprzak, NJ EDS/C&S Chapters, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Durga Misra (973) 596-5739 (dmisra@njit.edu), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Richard Snyder (973) 492-1207 (RS Microwave).

Feb. 25 – “Convert Your Consulting Business into a Full-Fledged Engineering Company”, NJ Consultants' Network, 6:00-8:30 PM, Morris County Library, 30 East Hanover Avenue, Whippany, NJ. Robert Walker, (973) 728-0344, or visit www.TechnologyOnTap.org.

Mar. 13 - May 15 – “C# .NET Programming” by Donald Hsu, PhD, 9:00 AM to 12:00 PM, Room: ECEC 202 , NJIT, 161 Warren Street, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Apr. 6 - May 25 – “Project Management” by George Sierchio, 6:30 PM to 9:00 PM, Room: ECEC 202 , NJIT, 161 Warren Street, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Members and Non-Members Welcome
PLEASE POST

NJ EDS/C&S:

Digital Radiography

On February 10, 2010, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "Digital Radiography." The speaker will be Distinguished Lecturer, Dr. Lucian A. Kasprzak.

About the Talk

If you or someone you know has had an x-ray recently, you may have discovered that things have changed in the radiology department. Almost all the techniques used today are digital. Some techniques used in the radiology department of a hospital are digital by nature. As examples, Computed Radiography, Magnetic Resonance Imaging and Computed Tomography come to mind. However, general radiography and mammography were not digital as originally conceived. These two types of medical radiography have gone through a transition in the last 15 years, resulting in the displacement of x-ray film radiography by digital devices. This change in media, so to speak, allows radiologists to see images almost instantaneously. Further, the infrastructure is now in place to quickly send these images literally around the world for analysis or second opinion.

After a brief description of the x-ray film technique, we will explore the digital technologies used in general radiography and mammography. The image capture technologies and their applications will be described with a focus on aspects of resolution and detection. These detectors use TFT technology similar to that used in flat panel displays. Key attributes of the detector pixels, such as, fill factor, modulation transfer function, detective quantum efficiency and fixed pattern noise will be reviewed. In addition, the components, materials and processes used in the fabrication of these devices will be examined to lend perspective on their performance and reliability. Finally, some practical challenges for possible future improvement will be advanced.

About the Speaker

Lucian A. Kasprzak received the PhD degree in Solid State Technology from the Materials Science Department of Stevens Institute of Technology in 1972, while on an IBM Resident Fellowship. He received a BS in Physics from Stevens in 1965 and an MS in Physics from Syracuse in 1970. He has worked, his entire career, on reliability of semiconductor devices and ICs, from their inception as discrete devices to ULSI. He discovered the hot electron effect in short channel MOSFET devices in 1973 while at IBM, from which he

retired in 1995. The past 14 years, he has been in the medical device industry in various R&D organizations. He pioneered the creation of IEEE transactions on Device and Materials Reliability and is on the Board of Directors of the International Reliability Physics Symposium. Dr. Kasprzak is a Fellow of the IEEE.

All Welcome!

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

Time: 7:00 PM, Wednesday, February 10, 2010. Free buffet will begin at 6:15 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/about/visit/gettingtonjit.php>.

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

NJ Consultants' Network:

Convert Your Consulting Business into a Full-Fledged Engineering Company

On Thursday, February 25, 2010, the IEEE Consultants' Network of Northern NJ (www.TechnologyOnTap.org) will present an informative talk, of great interest to all independent engineering professionals. Dan Kamdar will discuss how you can expand your one-man consulting business into a lucrative Engineering Company.

About the Topic

Many consultants stay in a small practice and never fully realize the potential of growing into a bigger business. Some may prefer this as their personal choice.

However, if you want to turn your practice into a multi-million dollar business, we highly recommend that you attend this talk. It will certainly spark your thinking.

Mr. Kamdar will describe how he joined CNNNJ about 10 years ago and started his consulting company. Soon thereafter, he embarked on a path of expansion of the business. His 'Affordable Engineering Services, LLC' is nowadays a thriving company with about 275 employees. As he will explain, that accomplishment requires a specific mindset.

About the Speaker

Dan Kamdar worked for Boeing as a

Senior Engineering Manager, in charge of a group of some fifty engineers. After 25 years at Boeing he retired and started his own consulting business. Dan, who is both an engineer and a businessman, moved from California to New Jersey in 1997.

Mr. Kamdar earned MBA, MSEE, BSEE and BSME degrees from the California State University and from the University of Michigan.

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!

Free admission – members and non-members are welcome.

Time: 6:00-8:30 PM, Thursday, February 25, 2010.

Place: Morris County Library, 30 East Hanover Avenue, Whippany, NJ. Directions to Library: www.mclib.info.

Information: For up-to-date meeting status, call Robert Walker, (973) 728-0344, or visit our website, www.TechnologyOnTap.org.

TCF-2010

The 35th Annual Trenton Computer Festival (TCF) will be held Saturday & Sunday, April 24th & 25th, 2010 <http://www.tcf-nj.org>.

The TCF IT Professional Conference is Friday April 23rd.

New this year, the ARRL NJ Amateur Radio Convention is being held coincident with the festival, on Sunday April 25th, all at The College of New Jersey, Ewing, New Jersey.

This year we are focusing on Open Source Software, but we are still interested in covering all topics relating to computers and digital technology. As 2010 is our 35th year, we are also seeking talks that deal with the history of PCs and their impact on society. We are looking for talks (50 minutes) and tutorials/workshop (100 minutes) on all forms of computer, digital electronics, information, communications technology, robotics, home/environmental control, Vid/Podcasting, gaming and digital home entertainment, digital photography, wireless technology, networking.

If you have an idea for a talk or workshop/tutorial for TCF, please fill out a Speaker Application form at http://tcf-nj.org/speaker_registration.html.

If you are interested in more information, or in speaking at the other related events. For the IT Professional Conference contact David Soll at dsoll@Omicron.com. For the Amateur "The IEEE Newsletter" – January 2010 - Page 4 NJ

Radio Conference contact Gary Wilson at k2gw@optonline.net. For TCF in general, contact Allen Katz, TCF Program Chairperson, a.katz@ieee.org, telephone: 609-771-2666, fax: 609-631-0177, US Mail: Dr. Allen Katz, School of Engineering, The College of New Jersey, PO Box 7718, Ewing, NJ 08628-0718.

Volunteer Teacher for 11-week apprenticeship with middle school students in Newark

Citizen Schools is a national non-profit serving low-income middle-school students after school, extending the number of hours spent in an active learning environment. A core program element is the project-based student apprenticeship. Each semester, generous volunteers get trained to become Citizen Teachers who lead these hands-on apprenticeships on a topic of their choosing, and about which they are both passionate and knowledgeable. These apprenticeships culminate in a WOW! moment where students teach back what they learned via the creation of a high-quality product, service or presentation that demonstrates their mastery.

We have a renewed focus on science, technology and engineering and are looking for ways to bring these to life in an exciting way to our students. This semester's offering has ranged from an Arup Consulting Engineering working with them on structural engineering to the students learning mechanical engineering principles by creating a dance pad. We are currently recruiting volunteers for the Spring semester (starting week of February 8th) to spend 90 minutes a week on either a Tuesday or Thursday (for 11 weeks) as Citizen Teachers in Newark (NJ) and would be interested in engaging yourself and/or your organization in the process. To learn more about the program (<http://www.youtube.com/profile?v=mx4xeO3Xq7g&user=citizenschoolsonline>), read about past apprenticeships (<http://ctnation.citizenschools.net/dotnetnuke/Teach/ThinkIt/ApprenticeshipIdeaBank/tabid/151/Default.aspx>) or apply to become a Citizen Teacher (<http://ctnation.citizenschools.net/dotnetnuke/Volunteer/SignUp/tabid/175/Default.aspx>).

To apply: <http://ctnation.citizenschools.net/dotnetnuke/Volunteer/SignUp/tabid/175/Default.aspx>

If you have any questions, please contact Bing Howell at binghowell@citizenschools.org.

North Jersey Spring 2010 Student Presentation Contest

The Spring 2010 Student Presentation Contest is coming up! The North Jersey Section will be holding a presentation contest scheduled for March 24, 2010, for undergraduate and graduate students. This contest has been held in years past. Its overwhelming success in generating student participation and interest make it a fantastic event for up and coming engineers. This year's contest will feature similar prizes (\$\$\$) and have graduate and undergraduate categories.

The main focus of the presentation contest is to give students an opportunity to sharpen their communication skills, and help prepare for real life situations as practicing engineers and researchers. Additionally, the North Jersey Section contest provides an excellent chance for students to practice for the Region I Student Paper contest in Spring.

The contest at the North Jersey Section level is also supplemented by awarding cash prizes to the three best presentations in both graduate and undergraduate categories. All engineering students are encouraged to participate in submitting team or individual presentations on any project work related to engineering. This local contest does not require students to write a full paper, just a slide-based presentation on technical or non-technical work is sufficient. Senior design projects, lab projects, personal engineering hobbies, engineering policy, etc., are great topics to submit. Moving onto the regional contest requires submitting a short written paper.

The details of contest rules, judging criteria, viable topics for presentations, and abstract form will be same as last year. Also, if you would like to get an idea of what topics would be appropriate or how you can prepare your abstract, take a look at winners from past years at the NNJ IEEE SAC homepage archive.

This year's North Jersey Section Contest will be open to graduate and undergraduate students and first/second/third place prizes will be awarded in each category of \$100/\$75/\$50. All participants MUST REGISTER by submitting an abstract by filling in the form available at the SAC website to qualify as a contest participant.

Time: starting at 6:00 PM with dinner at 5:30 PM, Wednesday, March 24, 2010.

Place: FDU, Teaneck, NJ (http://www.fdu.edu/visitorcenter/directions/teaneck_map.html).

Information: If you have any questions,

please email the contest organizer, northjerseysac@ieee.org (jignasa.ray@ieee.org).

North Jersey Section Seeks Committee Chairs and Volunteers

The North Section is seeking new volunteers to help conduct business for the benefit of its membership. There are a variety of volunteer positions open and available. They range from technical to non-technical, leadership or just participatory. For Society Chapter Chairs, you must be a member of the corresponding IEEE Society.

If you would like to become involved with volunteering in some of these efforts or positions or just become more informed about what is happening at the North Jersey Section, please contact Dr. Chandra Gupta at c.gupta@ieee.org. You are welcome to attend the Section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Some committees needing volunteers include the following. Please contact the person indicated for additional information.

- Power Electronics Society Chapter Chair - contact [c.gupta](mailto:c.gupta@ieee.org) below.
- GOLD (Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed - contact northjerseygold@ieee.org
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact kduncan@ieee.org
- Membership Development Committee Chair and Volunteers - contact [c.gupta](mailto:c.gupta@ieee.org) below.

Additionally, if interested volunteers would like to get more general information about the Section, including a complete listing of all chapters and committees, visit the North Jersey Section website <http://web.njit.edu/~ieeenj/>, or contact Dr. Chandra Gupta c.gupta@ieee.org.

North Jersey Volunteer Open House and 2010 Officer Election a Success

The North Jersey Section Volunteer Open House, Officer Training and Senior Member Information Session was held on Wednesday December 2, 2009 at New Jersey Institute of Technology in the ECE Building Room 202 and brought out a mix of over 30 volunteers and section members.

The evening started a buffet dinner and open networking session for existing section members and officers to meet and greet with new interested volunteers.

This year's event was an officer training program and volunteer open house along with a senior member information session. This meeting provided an opportunity to train current and new officers on what is required of them during the year to conduct IEEE North Jersey Section activities. It was also a way for new volunteers and officers to get an introduction of what to do and how to conduct successful programs as well as what other activities and opportunities exist to participate and volunteer with.

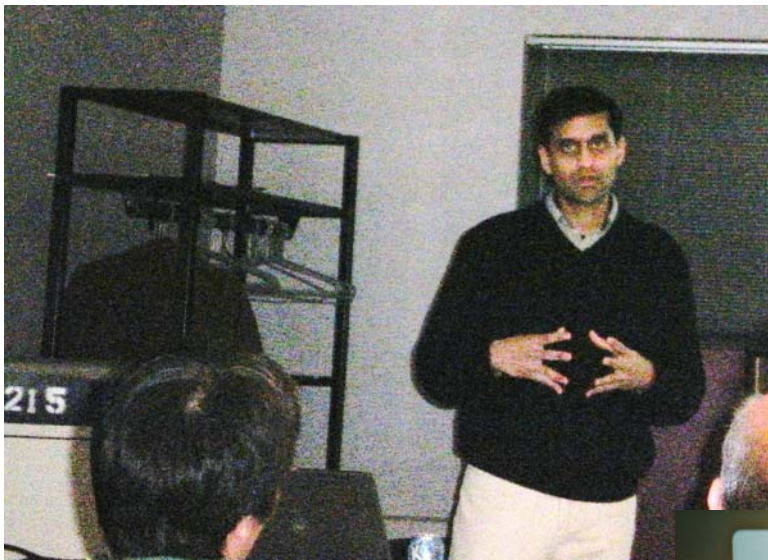
The meeting started with some IEEE introduction and background and then quickly moved to discussing new communication channels of how to stay more informed of local activities. Then the presentation reviewed what is required of section officers and a format for conducting successful events in the section.

The meeting was then paused to conduct the official business of this last executive committee meeting of 2009. This also covered Keith Saracinello, chair of the Teller's committee, announcing officer election results for 2010.

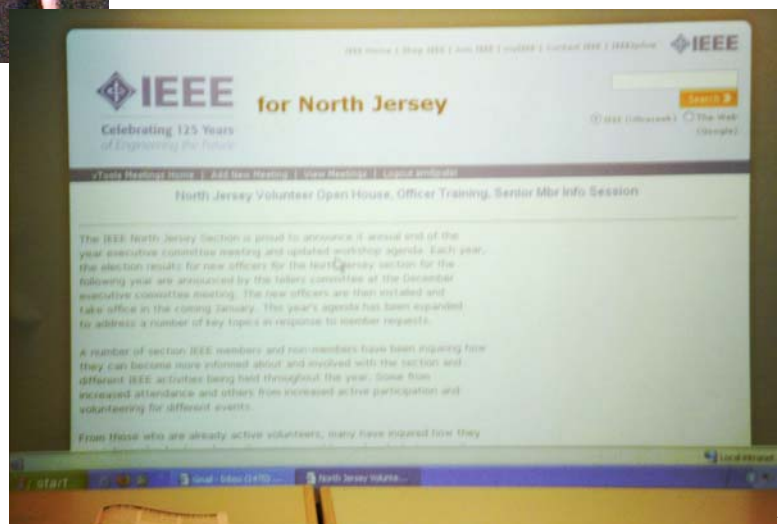
Chairperson:..... Amit Patel
Vice Chairman-1: Dr. Sanghoon Shin
Vice Chairman-2: Dr. Naresh Chand
Secretary: Russell Pepe
Members-At-Large:
..... Peter Donegan
..... Dr. Katherine Duncan
..... Dr. Mengchu Zhou

Then the meeting continued with a description of the senior membership application process and information about how applicants can get their required number of references. The meeting then had a formal introduction of all current and newly incoming officers to give everyone an opportunity to discuss with individuals aligned to their areas of technical and professional interests.

Lastly, the meeting concluded with cake, coffee, and pictures of attendees and officers. Some photos appear below.



North Jersey Section Chair, Amit Patel, leads the training workshop at NJIT





North Jersey Section Chair, Amit Patel (center), shares leadership ideas with Larry Yang (left), GOLD Chair, and Ron Quade, PE (right), PES Chair

METSAC December 5th Lunch Meeting



From left: Outgoing METSAC Chair Bob Pellegrino, Incoming Region 1 Director, Dr. Charles Rubenstein, METSAC Chair and Jr. Past North Jersey Section Chair, Kirit Dixit

LISAT2010

Sixth Annual IEEE Long Island Systems, Applications and Technology Conference

Friday, May 7, 2010

The Institute for Research & Technology Transfer at Farmingdale State College
State University of New York - Farmingdale, NY

CALL FOR PAPERS, PRESENTATIONS, EXHIBITORS and STUDENT PAPERS

The Long Island Systems, Applications and Technology (LISAT) Conference features several parallel professional tracks including topics in Systems, Applications, and Technology, along with an Exhibit Hall. We are currently soliciting submissions for participation in both the Technical Program and the Exhibit Hall, and are interested in papers, presentations, and exhibits that showcase the development and use of technology by local organizations. LISAT 2010 will also provide the opportunity for select student papers to be presented. Undergraduate and graduate students are encouraged to submit papers in an area of their interest or current work.

Preliminary acceptance to the Technical Program will be based on a 300-to-500-word abstract. Authors of accepted abstracts will be required to provide a six (6) page IEEE standard manuscript (in MS Word format) for publication in IEEE *Xplore*, and will be required to make a power point presentation at the conference. Manuscripts are subject to the LISAT Technical Program Committee's peer review and may require revision prior to final acceptance. Important dates for the Technical Program are:

Oct 31, 2009:	Abstracts due (300-to-500 words)
Nov 15, 2009:	Notification of accepted abstracts
Nov 30, 2009:	Biographies of authors and ½-page presentation outlines due
Jan 15, 2010:	Manuscripts for publication (MS Word) and copyright releases due
Jan 30, 2010:	Notification of final acceptance of manuscripts
Feb 15, 2010:	Presenter Registration Fee and two (2) sentence presentation descriptions due
Apr 1, 2010:	Power Point slide presentation due
May 7, 2010:	LISAT2010 Conference

All submissions must include the author's full names, affiliations, postal addresses, phone numbers, and email addresses. Submissions should be emailed to the LISAT Technical Program Committee at **LISATprogram@ieee.org**. Detailed instructions on submission, manuscript and presentation templates, and information on the conference, is available on the LISAT web site at <http://ewh.ieee.org/conf/lisat>

At least one author of *each* paper/presentation must register for the Conference and will be expected to provide a 20-minute presentation at the conference followed by 5 minutes of Q&A. Longer presentations will be considered. One presenting author will be allowed to register at a discounted rate. A limited number of tutorial and application presentations which will not be published by the IEEE may also be accepted

While LISAT welcomes a wide variety of papers in systems, applications, and technology, some examples of topics of particular interest are: *Homeland Defense, Alternate Energy Sources, Green Building Technologies, Mobile Communications, Microwave Technology, Electromagnetic Compatibility, Mobile Ad Hoc Networking, Network Security, Sensor Fusion, Antenna Systems and Processing, Radio Locationing, Radar Systems and Techniques, and Medical Electronics.*

For information on **Exhibiting** at LISAT, please contact: Fred Kruger at f.m.kruger@ieee.org
For all other information contact LISAT2010 Conference Chair: Dave Mesecher at d.mesecher@ieee.org or
Conference Co-Chair Charles Rubenstein at c.rubenstein@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 the Farmingdale State College (SUNY).

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 manuscript of each accepted paper.*

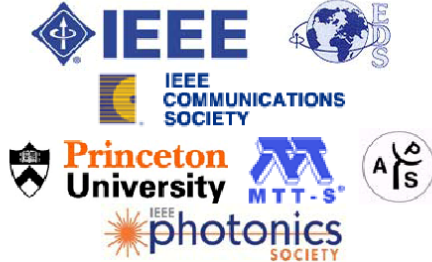
Call for Papers

The 33rd IEEE Sarnoff Symposium 2010

Sponsor

**IEEE Princeton/Central Jersey
Section**

Co-Sponsors (approved and pending)



Conference Chairs:

Nicholas Madamopoulos (City College of CUNY)
Ajay Rajkumar (Alcatel-Lucent)

Technical Program Chairs:

Edwin Hou (NJIT)
Pantelis Monogioudis (Alcatel-Lucent)
Sweta Jain (WinLab, Rutgers Univ.)

Publication Chair:

Christian Makaya (Telcordia)

Publicity Chair:

Maria Fresia (Princeton Univ.)

Registration Chair:

Pravin Raghuvanshi (DeVry)

Student Poster Chair:

Elias Kpodzo (iNetS-Stevens Institute of Techn.)

Tutorial Chair:

D. Deng (API Nanofabrication and Research Corp.)

Finance Chair:

Local Arrangement Chair:

Malay Ganai (NEC)

Exhibits Chair:

Joe Stack (DSI RF Systems, Inc.)

Military Panel Chair:

Matthew Zieniewicz (CERDEC)

Commercial Panel Chair:

Narayan Gehlot

Web master:

Komlan Egho (NJIT)

Since 1978 the IEEE Sarnoff Symposium has been bringing together a tremendous and rich diversity of telecom experts from industry, universities, and government. The popularity of the Sarnoff Symposium, again being held in the historic Nassau Inn located in the heart of downtown Princeton, NJ, continues to grow as the premier forum for researchers, engineers, and business executives in the North East drawing an attendance from all over the world. Besides the technical paper presentations, the Symposium will include *tutorials*, *student paper poster presentations*, *executive panels*, and *exhibition*.

Prospective authors are encouraged to submit a full paper for review. Only original papers that have not been published or submitted for publication elsewhere will be considered. The submission process is carried through the *EDAS conference management* system (<http://edas.info>). The manuscripts must follow the IEEE two-column format with single-spaced, 10-point font in the text. The maximum paper length is of five (5) pages. A sixth page may be accepted after an additional fee. Submission of a regular paper implies that at least one of the authors will have a full registration to the Conference and present the paper upon the acceptance of the submission. Manuscript template available at: www.sarnoffsymposium.org.

All accepted papers (after review by experts in the field) will be presented in oral sessions, included in the *33rd IEEE Sarnoff Symposium Proceedings* and published through **IEEE Xplore**. Student papers should be submitted to the Student Papers Chair (praghuwanshi@devry.edu). Prospective tutorial presenters should contact the Tutorials Chair (ekpodzo@msn.com).

IMPORTANT DATES

Papers, Panel and Tutorial Proposals Due:	Nov. 15, 2009
Student Papers Due:	Dec. 5, 2009
Notification of Tutorials Acceptance:	Jan. 7, 2010
Notification of Papers Acceptance:	Jan. 30, 2010
Final Version Due:	Mar. 1, 2010

CONFERENCE SCHEDULE

Tutorials:	Apr. 12, 2010
Paper Sessions and Panels:	Apr. 13-14, 2010
Exhibits:	Apr. 13, 2010
Poster Presentations:	Apr. 14, 2010

The Symposium is soliciting state-of-the-art research papers, panels and tutorial proposals in the following areas of interest.

Wireline Communication Systems

- Triple / Quad Play Architectures
- Broadband Access Networks
- IPTV

Optical Communications & Networking

- WDM Systems and Devices
- Broadband Access Communications
- Radio over Fiber (RoF)

Wireless Communications Systems

- 4G Cellular and Wireless LAN Systems
- MIMO Transmission Schemes
- Hierarchical Networks (Femto, Pico, Relays)
- Radio Resource and Interference Management
- Self Configuring and/or Optimizing Networks (SON)
- Sensor, Mesh and Ad Hoc Networks
- Free Space Optics (FSO) Wireless Systems
- Ultra Wideband (UWB) Communications
- Power Management for Green Communication
- Satellite Communication Systems
- Military Communication Systems
- Disruption Tolerant Networks

Communications and Information Theory

- Network Information Theory
- Cross-Layer Optimization Schemes

Applications

- Multimedia Applications for Mobile and Tethered Users
- Mobile Payment Applications
- Trust, Security, and Privacy
- Business Models for Mobile Applications

Wireless Communications Components

- Power Amplifiers
- Microwave Devices
- Antennas Design
- RF Repeaters
- Transceivers

IEEE North Jersey Section Course Software Testing and Quality Assurance

*Evenings, January 5, 2010 through January 14, 2010
Eight classes (January 5, 6, 7, 8, 11, 12, 13, 14, 2010)
Room: ECEC 202, New Jersey Institute Technology, 161 Warren Street,
Newark, NJ 07102 (Checks should not be mailed to this address)*

IEEE North Jersey Section appreciates NJIT for sponsoring this course at its site

The North Jersey Section IEEE is offering an evening course entitled "Software Testing and Quality Assurance". No prior experience in the software testing and QA is assumed. The course covers:

- **Fundamental concepts** with particular **emphasis on the practical aspects** of software testing
- Includes **process, and managerial topics**
- In a **step-by-step** manner, with course material contains a **large number of examples from real systems**

The IEEE certificate of completion will be given to you when you complete the course. You may wish to take ISTQB certification examination.

Instructor: Piyu Tripathy, Ph.D., has 16 years of experience in software testing and maintenance at Eicon networks, Nortel Networks, Cisco Systems, Airvana and NEC Laboratories America.

Software Testing and Quality Assurance: Theory and Practice by Authors: Sagar Naik and Piyu Tripathy, Publisher: Wiley, 2008 – This book is included with the registration fee.

This is not an exclusive ISTQB examination prep course. Software testing, quality assurance processes and concepts will be discussed in the class.

TOPICS

1. Fundamentals of testing theory and concepts
2. Practices that support production of quality software
3. Software testing techniques
4. Life-cycle models of requirements, defects, test cases, and test results
5. Process models for unit, integration, system, and acceptance testing
6. Test Automation
7. Building test teams, including recruiting and retaining test engineers
8. Quality Models and Capability Maturity Model
9. Testing Maturity Model and Test Process Improvement Model

WHERE: Room: ECEC 202 , NJIT, 161 Warren Street, Newark, NJ.(Checks **should not** be mailed to this address)

WHEN: January 5, 6, 7, 8, 11, 12, 13, 14, 2010, 6:30-9:00 PM.

COST: IEEE (& affiliate) members \$600; Non-IEEE members \$680.

CONTACT: Donald Hsu -email yanyou@hotmail.com

REGISTRATION: Software Testing and Quality Assurance

Please mail the registration form with the check (**Checks payable to "North Jersey Section IEEE"**) to **Mengchu Zhou, 37 Honeyman Road, Basking Ridge, NJ 07920 and notify Donald Hsu, Chair Education Committee, IEEE North Jersey Section, yanyou@hotmail.com.**

Name: _____

Non-member

email address

IEEE Member Member #: _____ Member of _____ technical society

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

I wish to receive IEEE completion certificate

Signature: _____

IEEE North Jersey Section Course C# .NET Programming

Saturday, March 13, 2010 through May 15, 2010

Eight weekly classes (March 13, 20, 27, April 3, 10, May 1, 8, 15, 2010)

Place: Room ECEC 202, New Jersey Institute of Technology, 161 Warren Street, Newark, New Jersey 07102
(Checks should not be mailed to this address)

IEEE North Jersey Section thanks New Jersey Institute of Technology, for sponsoring this course.

The IEEE North Jersey Section is offering a course entitled "C# .NET Programming". Since 2004, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 700+ 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 MCSA 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 2004, he has trained 700+ people in database, Java, WebLogic, XML, and C# .NET courses in 7 organizations.

TOPICS

1. Compare the enterprise development tools using Java to C# .NET
2. Define Visual Studio .NET Version 2005 to 2008
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 services, advanced topics
9. Present student Projects

WHERE: Room ECEC 202, New Jersey Inst Technology, 161 Warren Street, Newark, NJ

WHEN: Eight Saturdays, March 13, 20, 27, April 3, 10, May 1, 8, 15, 2010, 9:30 am to 12:00 noon.

COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.

CONTACT: Donald Hsu, yanyou@hotmail.com

REGISTRATION: C# .NET Programming

Please mail the completed registration with a check (payable to "North Jersey Section IEEE") to:

Donald Hsu, 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 the completed registration form and the payment are received, you are officially registered for this course. Registration status will be confirmed by email.

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Project Management

*Tuesday Evenings, April 6, through May 25, 2010
Eight weekly classes (April 6, 13, 20, 27, May 4, 11, 18, 25, 2010)
New Jersey Institute Technology, 161 Warren Street,
Newark, New Jersey (Checks should not be mailed to this address)*

IEEE North Jersey Section thanks New Jersey Institute Technology for sponsoring this course

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 5800+ 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 from the knowledge that 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: **George Sierchio**, business owner with 16 years of experience. He did technical consulting, training, and managed over 30 projects. He trained 500+ adult students in the last 10 years.

TOPICS

1. Explain the need for a project manager
2. Define SOW, PERT, GANTT, CPM, and Scope of the project
3. Identify the team members, resources and plan for the strategy
4. Calculate schedule, budget variances, and monitor project progress
5. Manage changes, estimates, and communications
6. Set a baseline, import tasks from MS Excel, export Project files to MS Word
7. Create and modify custom reports, templates and combination views
8. Share resources and create a master plan loaded to Project Server
9. Approve updates and conclude a project plan
10. Analyze global E-Commerce and present student Projects

WHERE: New Jersey Inst Technology, 161 Warren Street, Newark, NJ.
WHEN: 8 Tuesdays, April 6, 13, 20, 27, May 4, 11, 18, 25, 2010, 6:30-9:00 PM.
COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.
CONTACT: Donald Hsu: yanyou@hotmail.com

REGISTRATION: Project Management

Please mail the registration form with the check (**Checks payable to "North Jersey Section IEEE"**) to
Donald Hsu, 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 notified by email.

I wish to receive the IEEE Completion Certificate

Signature: _____