

THE IEEE NORTH JERSEY SECTION NEWSLETTER

Vol. 61, No. 8

SEPTEMBER 2014

In this Issue -

- **A Note from the Chair**
- **Schedule of 2014 EXCOM Meetings**
- **North Jersey Section Employment Network Announcement**
- **Article by Harry Roman**
- **Calendar of Events**
- **Meeting Announcements**
- **New Members of the IEEE North Jersey Section**
- **How to subscribe to this Newsletter if you are not an IEEE North Jersey Member?**
- **About Senior Membership**
- **Buyer's Edge Shopping service – announcement**
- **IEEE North Jersey Section Seeks Committee Members and Section Volunteers**
- **C# .NET Programming**
- **Project Risk Management**
- **Art of Speechcraft – Returns to Murray Hill**
- **North Jersey Section Hosts Fall 2014 Advanced Communications Symposium**
- **IEEE North Jersey Section MTT-Society and AP-Society Joint Chapter Present: 29th Annual Symposium and Mini-Show announcement**

A Note from the Chair

I hope you all had a great Labor Day Weekend. It is once again that time to get the kids ready for school. My house is getting empty, as I have a son off to Medical School and another daughter off to college this year. As many of you know, I am an Adjunct Instructor at NJIT, so I am back to teaching Transmission Systems to young minds ready to learn about Wireless and Fiber Optic Communications Systems. We are really getting ready for school at my house.

I started this section in the Newsletter when I became Chair of the North Jersey Section in January 2013. I am very proud to mention that the commentary seems to be a great success. I receive several e-mails and phone calls each month, commenting on something I wrote. I encourage your comments, so please feel free to contact me with your thoughts. Specifically, I mentioned in the August Newsletter that I was going to temporarily shelve my objective to start an EMC Society. Almost immediately, I received an e-mail from an IEEE North Jersey Section Member, stating that he was interested in starting a cooperative EMC and Safety Society. Since that e-mail, I was contacted by another Member who wants to Co-Chair the new Society. I am so glad I voiced my

position. We are on our way to having a North Jersey EMC/Safety Society.

I also want to mention that I will be presenting a talk on September 17 at Alcatel-Lucent in Murray Hill. This presentation is open to the general public, not only to Alcatel-Lucent employees or IEEE Members. The talk is sponsored by the IEEE North Jersey Section Technology Management Committee (TMC) and is entitled "Techniques of Engineering Management and its Application to Sales: Tips from a Seasoned Sales Engineer". Based on my 20+ years of experience as a Sales Engineer, and about 15 years as a Design, Test and Applications Engineer, a tutorial is presented on various sales techniques that are useful to both Sales Engineers and anyone else looking to hone their presentation, organizational and persuasive skills. It is also a chance for you to speak with the Chair. Register on vTools: <https://meetings.vtools.ieee.org/m/27285>.

A listing of upcoming talks, seminars, classes and conferences is enumerated in the Newsletter. Make it a point to attend a few each month to keep up with the industry. Also, check out the last page of the Newsletter for a full listing of the Societies and Committees in our Section. If you have a topic that you believe will be of interest to our Section, please contact the Society/Committee Chair or me. We are always looking for interesting and informative speakers.

I love hearing from all of our IEEE Members, so keep those calls and e-mails coming. My e-mail is always open.

Sincerely,

Russell C. Pepe

Chair, IEEE North Jersey Section

201-960-6796, rcpepe@ieee.org, atm_pepe@yahoo.com

LinkedIn: www.linkedin.com/pub/russell-c-pepe/0/a85/ba8

The 2014 EXCOM meetings are now in vTools - the schedule is as follows -

Wed	Oct 1	NJIT, Newark
Wed	Nov 5	Clifton Library

Electricity-the Great Enabler

The rapid rise in electrification in our homes is a big factor in energy consumption. This is a trend that started with the great electricity inventions of the late 1800s, spawning a watershed of domestic commercial applications that continues unabated. Personal computers, big screen TVs, and microwave ovens are the most recent manifestations of our appetites for kitchen appliances and leisurely pursuits.

When Thomas Edison built his historic Pearl Street central generating station in New York City in 1882, he unleashed a mighty engine of growth and prosperity. No matter how you slice it, electricity is a phenomenally versatile and clean form of energy, gaining ever-increasing prominence in our digital society. More and more we rely on this energy form. In 1940, 10% of our nation's energy consumption was used to produce electricity. In 1970, it was 25%. Today, it is 40%. Electricity is capable of conveying both energy and information.

Consider this historical chart of annual electric energy consumption for a typical residential home in New Jersey:

1940	755 kWh
1950	1307
1960	2489
1970	4995
1980	5549
1990	6035
2000	6650
2005	7050
2010	7360

This really illustrates the tremendous per capita growth in electric energy consumption in the residential sector. Most utilities in the US have seen similar growth statistics. Today, we use almost as much energy in one month as our great/grandparents used in all of 1940. We enjoy an unprecedented standard of living directly attributable to our ability to generate, distribute, and utilize electrical energy.

Look at the effective doubling of energy consumption between 1940-1950; almost another doubling again in the 1950-1960 periods; and yet again in 1960-1970. A doubling in 10 years means an annual growth rate in excess of 7 % per year, and this occurred for 30 straight years. This was the time we added to our homes a variety of new kitchen appliances, increased lighting, TV sets, and air conditioners. From 1970 on, the growth rate has been lower, but it is still a growth rate.

On a national basis, we can draw another interesting conclusion about the growth of electric energy consumption. In the 1940s, U.S. national energy consumption of all energy forms was somewhat less than about 33 quads [a "quad" is 1,000,000,000,000 Btu]. Today, we consume about 100 quads. So while the national energy picture grew almost 3 times between 1940 and today [33 to 100 quads], the electric energy consumption in the residential sector grew by 10 times [755 to 7360 kWh]. By the way, all nations combined annually, consume about 460 quads.

Talk to you again soon.....

Harry T. Roman
Senior Member, IEEE
North Jersey Section

North Jersey Section 2015 Nominations Final Petition Call and Current Slate

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.

The IEEE North Jersey Section Nomination Committee is making its final call for any petitions for nominations for the 2015 section officer election for any of the listed positions.

The Nominating Committee of the North Jersey Section of IEEE has proposed the following candidates to run for Section offices.

Chair:	Adriaan van Wijngaarden
Vice Chair 1:	Ajay Poddar
Vice Chair 2:	Kalyan Mondal
Secretary:	Kai Chen
Treasurer:	Mani Iyer
Members-at-large:	John Taylor
	Yu-Dong Yao
	Hannah (Hong) Zhao
	Mengchu Zhou

Additional candidates can be listed on the ballot by member petition.

Petitions must have a minimum of 25 Section member signatures, with their names and membership numbers clearly printed. The petition shall certify that the individual nominated will serve if elected.

The petition is to be sent to the Section Secretary (msnewell@ieee.org) no later than September 28th. Voting will take place by written ballot which will be published in November issue of the newsletter.

In addition, various societies will hold election of their respective officers (Chair, Vice Chair etc.). The members are encouraged to nominate for these positions if interested. One requirement for Society position is that the member should be a member of the society for which he or she should be a member of that society for which the nominations are sent. The Society Chairs will conduct these elections. A list of Societies is published herewith.

Also, there are a number of volunteer opportunities available in all capacity at various committees. The members are encouraged to apply for any of these positions. Please contact Amit Patel (a.j.patel@ieee.org), or Naresh Chand (chandnaresh@gmail.com) and send in your nominations with your Name, Address, Membership Number, E-mail and position for which the nomination is desired.

Calendar of Events

- Sept 3, 6:00 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Clifton NJ**
Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012, [Getting to Clifton Public Library](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- Sept 9, 11:00 AM to 12:00 PM: IEEE Computer Society- Benchmarking of Experimental Processor Becomes Computer Architecture Concept Worth Teaching – Kevin A. Kwiat, AFRL Rome, New York**
Location: Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, Teaneck, NJ 07666 [Getting to FDU](#)
Contact: Hong Zhao (201)-692-2350, zhao@fd.edu; Howard Leach h.leach@ieee.org [Read More...](#)
- Sept 10, 6:30 PM to 9:00 PM: IEEE North Jersey Section PACE- Engineers Meet (On the Second Wednesday of every month)**
Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 [Getting to Clifton Memorial Library](#) (Tel. 973 772-5500)
Contact: Paul Ward, 973 790-1625, peward@ieee.org Richard F. Tax, (201- 664-6954) rtax@verizon.net
- Sept 17, 6:00 PM to 8:30 PM: IEEE TMC- Techniques of Engineering Management and its application to Sales – Russell Pepe of ATM**
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Apratim Rajendra, 2018503457, apratim.rajendra@nomura.com, Vaseem Ahmed, vas201@gmail.com [Read More...](#)
- Sept 18, 2:00 PM to 3:00 PM: IEEE IT/COMSOC/VTS- Secure Broadcasting of a Common Message with Independent Secret Keys – Rafael Schaefer, Post Doc. Fellow of Princeton University**
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- Sept 23, 2:00 PM to 3:00 PM: IEEE SMC- Development of Chinese High-speed Rail Technology - Zhongping YANG, Ph.D. & Professor, School of Electrical Engineering, Beijing Jiaotong University, Beijing, China**
Location: NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)
Contact: Prof. Mengchu Zhou at zhou@njit.edu,
- Sept 23, 6:00 PM to 7:30 PM: IEEE IT/COMSOC/VTS- Software Defined Radio and Prototyping Platforms for Next-Generation Wireless Systems – Moti Ahmed of AgileAccessT**
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- Sept 25, 6:00 PM to 7:30 PM: IEEE MTT/AP, ED/CAS- Gold-Methods in Direction Finding - Dr. Kaluri V. Ranga Rao, JNTU at Hyderabad India**
Location: NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)
Contact: Dr.-Ing. Ajay Kumar Poddar, (201)560-3806 (akpoddar@ieee.org) Prof. Edip Niver: (973)596-3542), (edip.niver@njit.edu) [Read More...](#)
- October 1, 6:00 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Newark NJ**
Location: NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- October 30, 11:30 AM to 2:30 PM: IEEE North Jersey Section PES/IAS –Life Grade Luncheon – Dr. Robert Kerwin**
Location: Hanover Manor, 16 Eagle Rock Avenue, East Hanover, N J 07936 [Getting to Hanover Manor](#)
Contact: Ken Oexle at k.oexle@ieee.org or 973-386-1156 [Read More...](#)

IEEE NORTH JERSEY SECTION – Short Courses

IEEE North Jersey Section Course: C# .NET Programming - Seven weekly classes (September 6, 13, 27, October 4, 11, 18, 25, 2014) New Jersey Institute of Technology, Newark, New Jersey

IEEE North Jersey Section Course: Project Risk Management - Seven weekly classes (September 6, 13, 27, October 4, 11, 18, 25, 2014) New Jersey Institute of Technology, Newark, New Jersey

IEEE North Jersey Section MD/YP/WIE/PACE - Art of Speechcraft>Returns to Murray Hill (October 7, 14, 21, 28, November 4, 11, 18, 25, 2014) Bell Laboratories, Alcatel-Lucent, 600 Mountain Avenue in Murray Hill, NJ 07974

IEEE NORTH JERSEY SECTION – Advanced Communications Symposium and Poster Registration

- IEEE North Jersey Advanced Communications Symposium-Poster Registration** - September 20, 2014,, 8:00 AM to 6:00 PM) Babbio Center, Stevens Institute of Technology, 525 River Street, Hoboken, NJ 07030
- IEEE North Jersey Advanced Communications Symposium** - September 20, 2014, 8:00 AM to 6:00 PM) Babbio Center, Stevens Institute of Technology, 525 River Street, Hoboken, NJ 07030
- IEEE North Jersey Section AP/MTT - 29th Annual Symposium and Mini-Show** - October 02, 2014, 9:00 AM to 4:30 PM) Hanover Manor, 16 Eagle Rock Ave., East Hanover, NJ 07936. (973-992-7425)

- Prior registration is encouraged and appreciated. You do not have to be an IEEE member to attend any event.
- For up to date information, visit our website: [IEEE North Jersey Section](#) Visit: [vTools Registration](#) to register for a meeting or event

Meeting Announcements

3 Sept, 2014

IEEE North Jersey Section EXCOM Meeting – Clifton NJ

Meeting Agenda: This executive committee (EXCOM) meeting of the IEEE North Jersey Section will be held in the Activity Room of the Clifton Public Library (Allwood Branch, 44 Lyall Road, Clifton, NJ 07012, T: (973) 471 0555).

There will be a get-together with a buffet starting at 6 pm.

The meeting starts at 7 pm EST and typically ends at 8:45 pm, when the library closes. The meeting is meant to discuss and coordinate the section's activities and new initiatives.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

For more information, please contact Russell Pepe (rcpepe@ieee.org), Michael Newell, and/or Adriaan van Wijngaarden (avw@ieee.org).

The meeting agenda typically includes reports from the Secretary and Treasurer, reports from the Chapter and Affinity Group Chairs and Representatives, Committee Chairs, news related to the IEEE North Jersey Section, planning and new initiatives.

Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012,

[Getting to Clifton Public Library](#)

Time: 06:00PM to 08:45PM

Contact: Russell Pepe (rcpepe@ieee.org), Chris Peckham, and/or Adriaan van Wijngaarden (avw@ieee.org).

[For Updates and Registration: Click Here](#)

9 September, 2014

IEEE Computer Society and FDU presents - Benchmarking of Experimental Processor Becomes Computer Architecture Concept worth Teaching

Speaker: Kevin A. Kwiat

Abstract: A challenge to Air Force engineers was to design and develop a radiation-hardened microprocessor that embodied, at that time, a radical computer architecture. The requirements for space-borne processing called for designing a processor that, in addition to being rad-hard, fault-tolerant, and testable, would also achieve a high-level of performance. The measure of performance would come through the execution of a set of programs in a process called benchmarking. Experimental microprocessor designs impose limitations on benchmarking. Their fundamental novelty means that they have not yet incorporated many of the benchmarking support features found on fully developed machines. Benchmarking is

considered premature without these support features; yet, once meaningful performance measurements are obtained, then resources for further microprocessor development can be turned to the most promising of the proposed designs. The team devised a work-around to the problem of benchmarking a microprocessor early in its design: they created within the benchmark programs software simulations of a specialized hardware structure. This virtualization of hardware by software "matured" the design to the point needed for realistic performance measurement.

These lessons have been transferred to a computer architecture course where the students mimic the same challenges that faced the Air Force team who confronted benchmarking experimental microprocessors. By carrying out the term project, the college students gain experiential knowledge of designing hardware - in software - for solving a practical problem that remains relevant today.

Approved for Public Release; Distribution Unlimited: PA 06-161 08MAR06

Biography: Kevin A. Kwiat has been a civilian employee with the U.S. Air Force Research Laboratory (AFRL) in Rome, New York for over 30 years. He received the BS in Computer Science and the BA in Mathematics from Utica College of Syracuse University, and the MS in Computer Engineering and the Ph.D. in Computer Engineering from Syracuse University. He holds 4 patents. In addition to his duties with the Air Force, he is an adjunct professor of Computer Science at the State University of New York at Utica/Rome, an adjunct instructor of Computer Engineering at Syracuse University, and a Research Associate Professor with the University at Buffalo. He completed assignments as an adjunct professor at Utica College of Syracuse University, a lecturer at Hamilton College, a visiting scientist at Cornell University, and as a visiting researcher at the University of Edinburgh as part of the Air Force Office of Scientific Research "Window on Europe" program. He is an adviser for the National Research Council. He has been recognized by the AFRL Information Directorate with awards for best paper, excellence in technology teaming, and for outstanding individual basic research. His main research interest is dependable computer design.

Location: Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, Teaneck, NJ 07666 [Getting to FDU](#)

Time: 11:00 AM to 12:00 PM

Contact: Hong Zhao (201)-692-2350, zhao@fdu.edu; Howard Leach h.leach@ieee.org

[For Updates and Registration: Click Here](#)

10 September, 2014

IEEE North Jersey Section PACE – Engineers Meet

Meeting Agenda: Engineers Meet NNJ Section PACE (Professional Activities Committee for Engineers) meets on the Second Wednesday of every month.

Our North Jersey Section Professional Activities Committee (PACE) meets for informal discussions about the Engineering Profession. Join us with your thoughts and concerns and meet other Engineers.

Pizza & Refreshments: will be served during the mid-meeting break.

Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 [Getting to Clifton Memorial Library](#) (Tel. 973 772-5500)

Time: 6:30 to 9:00 PM, on the Second Wednesday of every month

Contact: Paul Ward, 973 790-1625, peward@ieee.org
Richard F. Tax, (201- 664-6954) rtax@verizon.net

17 Sept, 2014

IEEE IMS, TMC presents - Techniques of Engineering Management and its application to Sales

Speaker: Russell Pepe of ATM

Abstract: This IEEE TMC Seminar will be held at Bell Laboratories, Alcatel-Lucent, in Murray Hill, NJ, in Room 6A-106, which is located near the main entrance behind the Bell Labs Showcase exhibition area. It is not necessary to sign in to access this area.

There will be a get-together starting at 6 pm.

The seminar starts at 6:30 pm EST.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

This talk will cover issues, in the context of Engineering Management, which an Engineer finds useful in order to make a successful career move into Sales. The presentation will focus on Engineering Management techniques, both overt and subtle, that are seen with regard to successful Sales Engineers. The needs to develop a working strategy and a personal style will be covered. Discussions will draw information from Project Management, Human Resource, and Statistics etc, that are considered the back bone of Engineering Management, to discuss the mechanics of success, the measurements of activity, account identification, networking, investigation methods, required tools and resources, pricing issues and dealing with competition. The topics covered by the talk include: Basics, Activity, Strategy, Accounts, Account Identification, Contact, Network, Styles, Coach, Investigate,

Resources, Tools, Database, Funnel, Remember You, Price, and Competition.

Biography: Mr. Russell Pepe is the co-owner and sales engineer with Advanced Technical Marketing (ATM), a Manufacturer's Representative Company covering the northeast. Products include, Test Equipment, Components, Modules, Sub-Systems and Engineering Services, spanning technologies from RF, Microwave, Fiber Optics, EMC and Embedded Systems. Mr. Pepe has over 35 years of engineering experience, with about 20 years in sales. Russell received a BSEE and MSEE from NJIT. He has been a Member of the IEEE for 40 years and currently serves as the 2013-2014 IEEE North Jersey Section Chair.

Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)

Time: 06:00PM to 08:30PM

Contact: Apratim Rajendra, apratim.rajendra@nomura.com, 2018503457, Vaseem Ahmed, vas201@gmail.com

[For Updates and Registration: Click Here](#)

18 Sept, 2014

IEEE IT/COMSOC/VTS presents - Secure Broadcasting of a Common Message with Independent Secret Keys

Speaker: Rafael Schaefer of Princeton University

Abstract: Rafael Schaefer will be giving a presentation on secure broadcasting of a common message with independent secret keys. This presentation will be held at Bell Laboratories, Alcatel-Lucent, in Murray Hill, NJ, in Room 6A-106, which is located near the main entrance behind the Bell Labs Showcase exhibition area. It is not necessary to register as a visitor to access this area.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

The problem of secure broadcasting with independent secret keys is studied. The particular scenario is analyzed where a common message has to be broadcasted to two legitimate receivers, while keeping an external eavesdropper ignorant of it. The transmitter shares independent secret keys of arbitrary rates with both legitimate receivers, which can be used in different ways: They can be used as one-time pads to encrypt the common message or they can be used as randomization resources for wiretap coding. Both approaches are discussed in this talk. If both legitimate channels are degraded versions of the eavesdropper channel, it is shown that the one-time pad approach is optimal for several cases yielding corresponding capacity expressions. Reversely, the wiretap coding approach is shown to be optimal if the eavesdropper channel is degraded with respect to both legitimate channels establishing capacity in this case as well.

Biography: Rafael Schaefer is a Postdoctoral Research Fellow in the Department of Electrical Engineering at Princeton University. Before joining Princeton University, he was a research and teaching assistant at Technische Universität Berlin and Technische Universität München. In 2012, he received the Dr.-Ing. degree in electrical engineering from the Technische Universität München under the supervision of Prof. Holger Boche. In 2013, he received the VDE Johann-Philipp-Reis Prize for my work on physical layer security. He is one of the Exemplary Reviewers 2013 for the IEEE Communication Letters. His research interests are in the area of information theory and communication theory; in particular topics related to physical layer security, cyber-physical systems, and wireless communications.

Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)

Time: 02:00PM to 03:00PM

Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org),

[For Updates and Registration: Click Here](#)

20 Sept, 2014

IEEE North Jersey Section and its Communications, Computer, IT, VTS Chapters host: 2014 IEEE North Jersey Advanced Communications Symposium

Poster Registration

Overview

The 2014 IEEE North Jersey Advanced Communications Symposium is a full-day symposium on advanced communication systems. The symposium consists of six invited presentations and a parallel poster session.

The IEEE North Jersey Advanced Communications Symposium is a one-day technical symposium covering wireless communication and related topics. The symposium will be held at the Babbio Center, Stevens Institute of Technology, Hoboken, NJ, on Saturday, September 20, 2014. The symposium consists of six invited presentations and a parallel poster session. The posters will be on display all day and a special dedicated exhibition hour is scheduled for the presentation of the posters to all attendees. Poster presenters will have ample opportunities to interact with all attendees.

The organizing committee is currently inviting graduate students and post-doctorals to prepare a poster on their research results in communications and related fields. Master students, PhD candidates, and post docs are encouraged to participate by submitting a title and a short abstract of about 250 words to the poster session coordinator Prof. Hong Man (hong.man@stevens.edu) by Aug. 31, 2014. If the title and abstract are of sufficient quality and in the scope of the symposium, the prospective poster presenter will receive an invitation to present a poster at the symposium. An electronic

version of the poster is due on September 14, 2014. The poster presenters should bring a printed version to the symposium. The posters will be further evaluated prior to and during the symposium, based on the research results, the poster, and the presentation of the results.

Poster presentations will be on display all day and special dedicated exhibition times are scheduled for all attendees. Presenters will have opportunities to interact with all attendees. There will be two categories of poster awards: the 2014 IEEE North Jersey Section Wireless Communications Poster Awards and the 2014 IEEE North Jersey Section Data Networking Poster Awards. All submissions will be subject to review by the organizing committee. The first, second, and third place winners will receive prizes of \$200, \$150, and \$100, respectively. All poster presentations will receive participation certificates.

Poster Registration

Please use the link below to register a poster presentation, and use the comment field to provide the poster title.

Please also send the title and abstract to Prof. Hong Man (hman@stevens-tech.edu).

[Register a Poster Presentation](#)

For more detailed information, please check the website

<http://sites.ieee.org/northjersey/events/2014-njacs>

Location: Babbio Center, Stevens Institute of Technology
525 River Street, Hoboken, NJ 07030

[Getting to Stevens Institute of Technology](#)

Time: 08:00AM to 06:00PM (10.00 hours)

All times are: America/New York

For more information, please contact:

Amit Patel, Symposium Chair, a.j.patel@ieee.org

Hong Man, Poster Coordinator, hman@stevens.edu

Adriaan J. van Wijngaarden, Publicity, avw@ieee.org

20 Sept, 2014

IEEE North Jersey Section and its Communications, Computer, IT, VTS Chapters host:

2014 IEEE North Jersey Advanced Communications Symposium

Overview

The 2014 IEEE North Jersey Advanced Communications Symposium is a full-day symposium on advanced communication systems. The symposium consists of six invited presentations and a parallel poster session. Please check the symposium program below. There will be plenty of opportunities to interact with presenters and network with peers at any of the breaks, during lunch and the closing reception.

Registration Information

The registration fees for this symposium are as follows:

IEEE Member	until Sep. 14, 2014	\$ 25.00
	after Sep. 14, 2014	\$ 35.00
Student Member	until Sep. 14, 2014	\$ 15.00
	after Sep. 15, 2014	\$ 20.00
Graduate Student Member	until Sep. 15, 2014	\$ 15.00
	after Sep. 15, 2014	\$ 20.00
Life Member	until Sep. 15, 2014	\$ 15.00
	after Sep. 15, 2014	\$ 20.00
Non-Member	until Sep. 15, 2014	\$ 40.00
	after Sep. 15, 2014	\$ 50.00
Non-Member (student)	until Sep. 15, 2014	\$ 25.00
	after Sep. 15, 2014	\$ 30.00

Please use the following link to register:

[Updates and Registration: North Jersey Advanced Communications Symposium 2014](#)

For IEEE members, please enter your membership number and select the registration fee for the correct grade (the system makes a distinction between student member and graduate student member, and life member grade). If you have any problems with the registration, please contact Adriaan J. van Wijngaarden (avw@ieee.org).

Non-members are encouraged to become an IEEE member. Half-year dues are in effect:

New members joining between March 1 and August 15 are billed at half off the full-year membership dues, i.e., \$94 for regular members and \$16 for student members. For more information on becoming an IEEE member, please check Join IEEE.

For more detailed information, please check the website

<http://sites.ieee.org/northjersey/events/2014-njacs>

This symposium is being organized by the IEEE North Jersey Section and its Communications, Computer, Information Theory and Vehicular Technology Chapters. The event is co-sponsored by the IEEE New Jersey Coast Communications, Computer, and AP/VT/EMC Chapters as well as the IEEE Princeton/Central Jersey Computer and Consumer Electronics/Communications Chapter.

Location: Babbio Center, Stevens Institute of Technology
525 River Street, Hoboken, NJ 07030

[Getting to Stevens Institute of Technology](#)

Time: 08:00AM to 06:00PM (10.00 hours)

All times are: America/New York

For more information, please contact:

Amit Patel, Symposium Chair, a.j.patel@ieee.org

Mani Iyer, Program Chair, mani.iyer@ieee.org

Adriaan J. van Wijngaarden, Publicity, avw@ieee.org

[Click Here to Register \(admission fee applies\)](#)

Meeting Agenda: The symposium program is as follows:

08:15-09:00	Registration, Meet and Greet, Poster Set-Up
09:00-09:15	Opening Remarks: Amit Patel, Symposium Chair and IEEE Communication Chapter Chair
09:15-10:00	Ultra Low Power, Short Range Wireless Communications: From Using RF Pulses to Ultrasound Clicks Dr. Peter Kinget, Professor, Columbia University
10:00-10:30	Coffee Break
10:30-11:15	Small Cells - Big Impacts: Performance Improvements and Deployment Challenges Dr. Amit Mukhopadhyay, Director, Wireless Network Modeling, Bell Laboratories, Alcatel-Lucent
11:15-12:00	The Exponential Growth of the Internet-of-Things Joe Jesson, Adj. Prof., TCNJ, and CTO, Assurenet
12:00-13:30	Lunch and Poster Presentations
13:30-14:15	Backhauling in TV White Spaces - Dr. Narayan Mandayam, Professor, WINLAB, Rutgers University
14:15-15:00	Role of Software Defined Networking in Mobile Networks Colin Kahn, member, Corporate CTO, Bell Laboratories, Alcatel-Lucent
15:00-15:30	Coffee Break
15:30-16:15	Self-Organizing Networks - Dr. Rudra Kumar Shivalingaiah, Senior Staff Engineer, Qualcomm
16:15-16:30	Poster Awards - Dr. Hong Man, Professor, Stevens Institute of Technology
16:30-16:45	Closing Remarks
16:45-17:15	Networking

23 September, 2014

IEEE IT, COMSOC and VTS presents - Software Defined Radio and Prototyping Platforms for Next-Generation Wireless Systems

Speaker: Tristan Martin, Nutaq, and Moti Ahmed, AgileAccess

Abstract: This presentation will give an introduction to software defined radio (SDR) and two prototyping platforms in the context of 3G and 4G (e.g., WiFi and LTE): model-based design tools for PC development (GNU Radio) and model-based design tools for FPGA Development (System Generator). It will also include an overview of mixed architecture and how the FPGA can be leveraged to offload the CPU. The talk will contain an illustrative use case of an FPGA implementation of a Polyphase Channelizer for GSM/EDGE and an FPGA OFDM Physical Layer (802.11a) controlled from GNU Radio. The second part of the talk will investigate how SDR concepts can be extended to support prototyping in the context of 5G (Massive MIMO). RF upgradability with millimeter wave support and replaceable radio heads are mandatory to accommodate growth to 5G. Massive numbers of RF channels (100x100 or more) together with over-the-air bandwidth requirements of up to 250 MHz per antenna leads to channel aggregation bottleneck in traditional systems architecture. A new architecture and 5G Massive MIMO tested, with scalable central processing engine comprised of distributed FPGA clusters, and based on advanced telecom industry standards (ATCA, MicroTCA, FMC) will be presented. The demonstration part of this presentation uses Software Defined Radio (SDR) platforms, including the new PicoSDR device that has internal MIMO transceivers (2x2 or 4x4) with a 28 MHz bandwidth each and a tuning range of 300 MHz to 3.8 GHz, and the PicoDigitizer that uses external wideband (100/200 MHz) receivers with a tuning range of 100 kHz up to 8/20/30 GHz and phase coherency for beam forming (1, up to 8, and up to 16 elements configurations).

Biography: Tristan Martin has a bachelor degree in electrical engineering and a master degree in computer engineering. He has gained experience in the past working for CAE Inc. as a System Software Specialist, where he worked on requirements management, design, development, integration, deployment, and update of digital audio technologies and simulation software products. He was also responsible of environmental acoustics recording and data gathering on military aircraft, sound and vibration data analysis, modeling, and re-synthesis. He is currently a technical expert in tailoring Nutaq's FPGA- and CPU-based solutions and providing system architecture guidance to end customers in the early phase of their projects for some of the world's most demanding military and scientific applications. He is enthusiastic about process improvement, the Software Defined Radio (SDR) user community, and is a C++ programmer in his spare time. He provides Nutaq's

clients with a strong customer focus and a high ability to synthesize information.

Moti Ahmed is with AgileAccessT, Flemington, NJ. His early career is in video, in particular systems integration, maintenance, and restoration of broadcast video equipment. Later, he joined RCA Somerville, New Jersey, as a Test Engineer, where he developed hardware interfaces, test fixtures writing software for ATE, for production testing of Video LSI. He moved to IC Design within RCA, where he developed several video signal processing chips for Catalog and Custom. His wireless career began at BL Reading, PA, where he got involved in exploratory chip-set design for the GSM Standard. Later, he moved to the Wireless Radio Group in Whippany, NJ, where he investigated radio architectures and design methods for high performance radio receivers for base Stations. Other independent activities included fiber-optic wireless carrier transport, and network components for Distributed Antenna Systems (DAS). He is currently an independent consultant. Among others, he supports LTE eNB radio hardware development, and eNB hardware integration and testing. His current interests include Software Definable Radio (SDR), millimeter-wave technology tracking, and FPGA Programming.

Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)

Time: 06:00PM to 07:30PM

Contact: Adriaan van Wijngaarden (avw@ieee.org)

[For Updates and Registration: Click Here](#)

23 September, 2014

IEEE SMC presents - Development of Chinese High-speed Rail Technology

Speaker: Zhongping YANG, Ph.D. & Professor, School of Electrical Engineering, Beijing Jiaotong University, Beijing, China

Abstract: In recent years, the construction of China's high-speed rail is progressing rapidly. Currently, the total length of the high-speed rail network in China has reached to more than 10,000 kilometers, the longest one in the world. The high-speed rail has significantly promoted the economic and social development in China, and received attention from all over the world. This presentation will explain 1) The reasons that supported China to build the world longest high speed rail network in a relatively short period of time; 2) The technical features of China's high-speed rail in comparison with Japanese and European ones; 3) The new high-speed rail technology under development in China; and 4) Future topics and directions.

Biography: Zhongping YANG received a B.Eng. degree from Tokyo University of Mercantile Marine in 1997, and the M.Eng. degree and Ph.D. degree from the University of Tokyo, in 1999 and 2002 respectively. He is currently a professor at the School of Electrical Engineering, Beijing

Jiaotong University, Beijing, China. His research interests include high-speed rail integration technology, traction & regenerative braking technology, and wireless power transfer of urban rail vehicles. He received the “Zhan Tianyou” Award of Science and Technology in 2010 and the Excellent Popular Science and Technology Book Award in 2011.

Location: NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)

Time: 02:00PM to 03:00PM

Contact: Prof. Mengchu Zhou at zhou@njit.edu

[For Updates and Registration: Click Here](#)

25 September, 2014

IEEE IT, MTT/AP, ED/CAS present - Gold-Methods in Direction Finding

Speaker: Dr. Kaluri V. Ranga Rao, JNTU at Hyderabad India

Abstract: Smith-Rose and Hopkins state that direction-finding of ultra-short waves was attempted from the times of Hertz (1880's) itself. Later, various systems for direction finding have been attempted using rotatable beams (mechanical) leading to the development on a commercial scale of the course-indicating beacons and landing-beam systems now in use for the guidance of aircraft. As a fall out of advances in digital technology and Digital Signal Processing (DSP) electronic beam-steering replaced mechanical systems. The problems of direction-finding at high frequencies were stated by Ross. In this presentation, state of the art techniques developed by speaker will be discussed.

Biography: Dr. Kaluri V. Ranga Rao Earned his BSEE from Andhra University in 1974 and MSCS from the Indian Institute of Science, Bangalore in 1977. He received an MSSE in 1991 from the US Naval Post Graduate School and a Ph.D. from the Indian Institute of Technology (Madras) in 1994. He is a Senior Member of the IEEE. He is the author of a text book on DSP applications, published by John Wiley (UK). Currently he is a Professor Emeritus at the Dept of ECE, JNTU-H, Hyderabad, and Industrial Consultant for many companies, India.

Before that, he was the Chief Scientist of Tanla Solutions, VP Engineering at Sarayu Softech, Chief Engineer at General Electric (Hyderabad), Vice President Satyam Computer Services, CEO of GMR Vasavi Infotech and Project Director, Senior Scientist in DRDO, Principal Investigator for DRDO project. He has been a Visiting Professor at IITD, Visiting Scholar at Oklahoma State University, Visiting Professor at IIIT-H, and Visiting Scholar at CMU.

Prof Rangarao published 25 IEEE transaction and conference papers, and holds several US and Indian patents.

Best paper award at RADAR conference-2011 Chengdu China, Best paper award at Digital Avionics Systems Conference (DASC) 2013 at Syracuse, US

Email: kaluri@ieee.org

Address: Columbus, Ohio, United States

Location: NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)

Time: 06:00PM to 07:30PM

Contact: Dr.-Ing. Ajay Kumar Poddar, (201)560-3806 (akpoddar@ieee.org) Prof. Edip Niver: (973)596-3542, (edip.niver@njit.edu)

[For Updates and Registration: Click Here](#)

1 October, 2014

IEEE North Jersey Section EXCOM Meeting – Newark, NJ

Meeting Agenda: This executive committee (EXCOM) meeting of the IEEE North Jersey Section will be held at The New Jersey Institute of Technology (NJIT), in Newark NJ. The meeting will take place in the ECE Building, Room ECE-202, 161, Warren Street, Newark, NJ

There will be a get-together with a buffet starting at 6 pm.

The meeting starts at 7 pm EST and typically ends at 8:45 pm. The meeting is meant to discuss and coordinate the section's activities and new initiatives.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

For more information, please contact Russell Pepe (rcpepe@ieee.org), Chris Peckham (cdp@ieee.org) and/or Adriaan van Wijngaarden (avw@ieee.org).

The meeting agenda typically includes reports from the Secretary and Treasurer, reports from the Chapter and Affinity Group Chairs and Representatives, Committee Chairs, news related to the IEEE North Jersey Section, planning and new initiatives.

Parking is available at 154, Summit Street, Newark, NJ 07102

Location: : NJIT, ECE 202, 161 Warren Street, Newark, NJ 07102, [Getting to NJIT](#)

Time: 06:00PM to 08:45PM

Contact: Russell Pepe (rcpepe@ieee.org), and/or Adriaan van Wijngaarden (avw@ieee.org).

[For Updates and Registration: Click Here](#)

30 October, 2014

IEEE PES/IAS host – Life Grade Luncheon and present: ‘Silicon-Gate’, by its Inventor

Speaker: Dr. Robert Kerwin

Abstract: Dr. Robert Kerwin will give an informal presentation on the invention and development of the Silicon-Gate process and its paradigm shifting impact on the Integrated Circuit industry.

Biography: Robert Kerwin is currently a consultant in electronics technology, intellectual property management, and quality management practices. He retired from AT&T in 1994 as General Manager of the Intellectual Property Division. Prior to that, he was Manager, Corporate Quality, AT&T, after 22 years at AT&T Bell Labs.

At AT&T Bell Labs, Dr. Kerwin was a member of Technical Staff in the Electronic Component Processes Laboratory (1964-1971), supervised the Photolithography Development Group (1971-1974), supervised the Murray Hill Integrated Circuit Design Capability Line for CMOS processing technology (1974-1980), and headed the Component Quality and Reliability Department for AT&T (1980-1986).

He has B.S., M.S. and a Ph.D. degrees in Chemistry from Boston College, MIT, and the University of Pittsburgh respectively. Prior to joining AT&T Bell Laboratories, he was a Research Fellow in the Polymer Studies Group at the Mellon Institute.

He is a Fellow of Bell Laboratories and the American Institute of Chemistry and a member of the Society of Sigma Xi, the American Association for the Advancement of Science, and the IEEE. He received the IEEE Jack A. Morton Award “For Outstanding Contributions in the Field of Solid State Devices”, and the Inventor of the Year Award from the NJ Inventors Hall of Fame.

He holds 15 patents including the fundamental silicon-gate process used in all semiconductor memory and microprocessor devices. He has published 15 papers and five book chapters on microelectronics quality management, and intellectual property.

Dr. Kerwin has served on the Board of Examiners for the Malcolm Baldrige National Quality Award (1988-1991), and lectured at the Brookings Institution (1986-1991).

Advanced registration is required prior to October 23rd, for 30 only in order of receipt. To registration with \$5.00 fee, contact Ken Oexle at k.oexle@ieee.org or 973-386-1156 for form.

Location: 16 Eagle Rock Avenue, East Hanover, NJ, 07936
[Getting to NJIT](#)

Time: 11:30 AM to 2:30 PM

Contact: Ken Oexle at k.oexle@ieee.org or 973-386-1156 for form

[For Updates and Registration: Click Here](#)

Welcome! New Members of the IEEE North Jersey Section

Full Name	Current IEEE Grade
Olumide Adewale	Student Member
Pooja Balsara	Student Member
Kolawole Campbell	Student Member
Peter Charuza	Student Member
Chia-Han Chiang	Student Member
Lawrence D'Aries	Member
Rey Duarte	Member
Ammar Gharaibeh	Graduate Student Member
Ria Kapadia	Member
Ryan Keller	Student Member
Steven Looney	Member
Chris O'Shea	Graduate Student Member
Haymant Ramkissoon	Student Member
Umar Rao	Student Member
Yanzhi Ren	Graduate Student Member
Joseph Sloboda	Member

How to subscribe to this newsletter if you are not an IEEE North Jersey Member?

To subscribe, send an email to: listserv@listserv.ieee.org, with the body containing "subscribe northjerseypublic"

To unsubscribe, send an email to: listserv@listserv.ieee.org, with the body containing "signoff northjerseypublic"

Additionally, you can join the IEEE North Jersey Section Facebook Fan Page at:

www.facebook.com/pages/IEEE-North-Jersey-Section

Follow us on Twitter at: twitter.com/ieeenorthjersey

Or join the LinkedIn IEEE North Jersey Section Group at: [LinkedIn Group Invitation](#)

North Jersey Section Employment Network Announcement

Join the North Jersey Employment Network for assistance with your job search. By joining our network, you will have access to our LinkedIn group and to seminars in a variety of emerging technologies such as Hadoop, Big Data, Python, Cloud, Analytics, Java, etc.

For additional information or to join the LinkedIn group, please email the Employment Network Chair, Suzanne McIntosh (mcintosh@cs.nyu.edu).

About Senior Membership

Do you know an outstanding IEEE member who is not yet an IEEE Senior Member? Do you feel that you are qualified for such recognition? If you are interested in becoming a Senior Member or nominating a fellow IEEE member please see http://www.ieee.org/membership_services/membership/senior for an application and for qualification requirements.

Assistance with references is found on the Senior Member Web page and within the application form. You can also contact any of the North Jersey Section Executive Committee members including Membership Development Chair or Society Chapter Chairs at the local level or attend an IEEE North Jersey Section meeting or upcoming Senior Member Drives, where qualified attendees will be happy to actively support you in the nomination process.

Important information – Buyer’s Edge Shopping

IEEE - North Jersey Group # 1431

The IEEE North Jersey Section is now a Member of the Buyer’s Edge Shopping Service. The Buyer’s Edge is a buying service that guarantees the lowest prices on major purchases for its 4 million members in the tri-state area of NY, NJ, CT and greater Philadelphia. They offer a Buy-By-Phone, Buy-Online and, in certain benefit categories and areas, Buy-In-Person. Many member benefits are available nationally, like Cars, Furniture and Kitchens; whereas, some benefits, like Appliances, are for the tri-state area only.

It is easy to use the services of the Buyer’s Club. Visit the Web Site at: <http://www.buyersedgeinc.com>

Then, enter the following login information: Username: 1431, Password: member1

Happy shopping!

IEEE North Jersey Section Seeks Committee Chairs and Section Volunteers

The IEEE North Jersey 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. A list of IEEE North Jersey Societies, Chapters, Groups and Committees are published at the end of the newsletter for those interested in participating. 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 Nominations Committee chair, Amit Patel at a.j.patel@ieee.org. You are welcome to attend the Section’s executive committee meeting held the first Wednesday of every month to learn more about volunteer activities that require some help. Please check out the website below for published meeting times and locations. Some committees needing volunteers include the following. Please contact the person indicated for additional information.

Young Professionals (formerly Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed

Contact: John Taylor (john.taylor1204@gmail.com)

WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed –

Contact: Zhiwei Mao (zmao@fdu.edu)

EMBS (Engineering in Medicine and Biology Society) is seeking active committee volunteers –

Contact: raquelpc@njit.edu

Computer Society Chapter Committee Volunteers –

Contact: Zhiwei Mao zhao@fdu.edu

Technical Management Council Committee Volunteers –

Contact: Apratim Rajendra (apratim.rajendra@nomura.com) and Vaseem Ahmed (vas201@gmail.com)

North Jersey Section Awards Committee Volunteers –

Contact: Ken Oexle (k.oexle@ieee.org)

Membership Development Committee Volunteers –

Contact: Mani Iyer (miyer108@gmail.com)

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://sites.ieee.org/northjersey> or contact anyone listed above.

[Back to Calendar of Events](#)

IEEE North Jersey Section Course

C# .NET Programming

Saturdays, September 6 through October 25, 2014

Seven weekly classes (September 6, 13, 27, October 4, 11, 18, 25, 2014)

New Jersey Institute of Technology, Newark, New Jersey (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 2008, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 1000+ C# .NET jobs (up from 820 last year) 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 Achievement and earn 2 IEEE Continuing Education Units (CEUs) when you complete the course. Microsoft Corp. has MCAD and MCS D certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course. Past attendees got jobs at AT&T, Goldman Sachs, IBM, Microsoft, Verizon, and other Fortune 500 firms.

Instructor: Donald Hsu, PhD., Donald Hsu, PhD., has been a corporate manager for 20+ years and is an experienced trainer. Since 2008, he has trained 700+ people in C++, Java, Oracle, and WebLogic, XML, and C#.NET in 8 different organizations.

TOPICS

1. Compare the enterprise development tools using Java to C# .NET
2. Define Visual Studio .NET Version 2008, 2010 and latest
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: New Jersey Institute Technology, Newark, New Jersey

WHEN: 7 Saturdays, March 1, 8, 22, 29, April 5, 12, 19, 2014, 9:00 AM to 12:00 noon

COST: IEEE 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, PhD, Chair Education Committee, IEEE North Jersey Section, P.O. Box 2093, Fort Lee, New Jersey 07024.

Name: _____ Email address _____

Non-member

IEEE Member Member #: _____

Employer: _____

Employer Address: _____

Home Address: _____

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

Please enclose required fee payable to: **North Jersey Section IEEE**

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Project Risk Management

Saturdays, September 6 through October 25, 2014

Seven weekly classes (September 6, 13, 27, October 4, 11, 18, 25, 2014)

New Jersey Institute of Technology (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 a course entitled "Project Risk Management". Dice.com lists 5000+ Project/Risk related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, develop risk plans, pinpoint possible solutions, and provide strategies to keep the project under control. Using Microsoft Project 2013 software, you will learn to accomplish many projects. In addition, it will greatly enhance your business, communications and interpersonal skills.

You will receive the IEEE Certificate of Achievement and earn 2 IEEE Continuing Education Units (CEUs) when you complete the course. You may wish to take the Certification exam 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. ***** However, past attendees did successfully get the PMP certifications!

Instructor: Marilyn Moux, PMP, ITILv3, Cloud Essentials, CAP and Security+., has been a corporate manager for 20+ years and an IT security professional with experience within the entire Software Development Life Cycle Project Management.

TOPICS

- Explain the need for a project risk manager
- Define SOW, PERT, GANTT, CPM, and Scope of the project
- Identify the team members, resources and plan for the strategy
- Calculate schedule, budget variances, and monitor project progress
- Manage changes, estimates, and communications
- Set a baseline, import tasks from MS Excel, export MS Project files to MS Word
- Approve updates and conclude a project plan
- Analyze Cloud Computing, Service Level Agreements, IT Security
- Present student Projects

WHERE: New Jersey Institute Technology, Newark, New Jersey

WHEN: 7 Saturdays, (September 6, 13, 27, October 4, 11, 18, 25, 2014) 9:00 am to 12:00 noon

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

CONTACT: Donald Hsu, yanyou@hotmail.com,

REGISTRATION: [Project Risk Management in Seven Saturdays](#)

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

Dr. 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**

I wish to receive the IEEE Completion Certificate

Signature: _____

IEEE North Jersey Advanced Communications Symposium

Stevens Institute of Technology, Hoboken, NJ

Saturday, September 20, 2014

General Chair

Amit Patel

Program Chair

Mani Iyer

Poster Session Chair

Hong Man

Local Arrangements

Yu-Dong Yao

Publicity

Adriaan van Wijngaarden

Event Coordinator

Nagi Naganathan

Registrations

Mike Newell

Co-Sponsored by

IEEE North Jersey Section
IEEE North Jersey
Communications Society
Chapter

IEEE North Jersey
Computer Society Chapter

IEEE North Jersey/New
York Information Theory
Society Chapter

IEEE North Jersey
Vehicular Technology
Society Chapter

IEEE New Jersey Coast
Communications Society
Chapter

IEEE New Jersey Coast
AP/VT/EMC Societies Joint
Chapter

IEEE New Jersey Coast
Computer Society Chapter

IEEE Princeton/Central
Jersey Computer,
Communication Society
Chapter

CTIF-USA

The 2014 IEEE North Jersey Advanced Communications Symposium will be held at the **Babbio Center**, Stevens Institute of Technology, in Hoboken, NJ, on Saturday, September 20, 2014. The symposium consists of six invited presentations and a parallel poster session. The symposium program will cover advanced topics in communications, including small cells, internet-of-things, self-organizing networks and software defined networks. The posters will be presented by graduate students and postdocs. Poster presentations will be on display all day and special dedicated exhibition times are scheduled for all attendees. There will be two categories of poster awards: the 2014 IEEE North Jersey Section Wireless Communications Poster Awards and the 2014 IEEE North Jersey Section Data Networking Poster Awards. There will be plenty of opportunities to interact with presenters and network with peers.

Symposium Program

08:15–09:00 **Registration, Meet and Greet, Poster Set-Up**

09:00–09:15 **Opening Remarks**

Amit Patel, *Symposium Chair and IEEE Communications Society Chapter Chair*

09:15–10:00 **Ultra Low Power, Short Range Wireless Communications: From Using RF Pulses to Ultrasound Clicks**

Dr. Peter Kinget, *Professor, Columbia University*

10:00–10:30 **Coffee Break**

10:30–11:15 **Small Cells – Big Impacts: Performance Improvements and Deployment Challenges**

Dr. Amit Mukhopadhyay, *Director, Wireless Network Modeling, Bell Labs, Alcatel-Lucent*

11:15–12:00 **The Exponential Growth of the Internet-of-Things**

Joe Jesson, *Adjunct Professor, TCNJ, and CTO, Assurennet*

12:00–13:30 **Lunch and Poster Presentations**

13:30–14:15 **Backhauling in TV White Spaces**

Dr. Narayan Mandayam, *Professor, WINLAB, Rutgers University*

14:15–15:00 **Role of Software Defined Networking in Mobile Networks**

Colin Kahn, *member, Corporate CTO, Bell Labs, Alcatel-Lucent*

15:00–15:30 **Coffee Break**

15:30–16:15 **Self-Organizing Networks**

Dr. Rudra Kumar Shivalingaiah, *Senior Staff Engineer, Qualcomm Technologies, Inc.*

16:00–16:30 **Poster Awards**

Dr. Hong Man, *Professor, Stevens Institute of Technology*

16:30–16:45 **Closing Remarks**

16:45–17:15 **Networking**

Registration	before Sep. 14, 2014	after Sep. 14, 2014
IEEE member	\$ 25.00	\$ 35.00
IEEE student member/graduate student member/life member	\$ 15.00	\$ 20.00
Non-member	\$ 40.00	\$ 50.00
Non-member (student/graduate student)	\$ 25.00	\$ 30.00

For more information and registration, please check: <http://sites.ieee.org/northjersey/events/2014-njacs>



CALL FOR POSTERS

IEEE North Jersey Advanced Communications Symposium

Stevens Institute of Technology, Hoboken, NJ • Saturday, September 20, 2014

General Chair

Amit Patel

Program Chair

Mani Iyer

Poster Session Chair

Hong Man

Local Arrangements

Yu-Dong Yao

Publicity

Adriaan van Wijngaarden

Event Coordinator

Nagi Naganathan

Registrations

Michael Newell

Co-Sponsored by

IEEE North Jersey Section

IEEE North Jersey
Communications Society
Chapter

IEEE North Jersey
Computer Society Chapter
IEEE North Jersey/New
York Information Theory
Society Chapter

IEEE North Jersey
Vehicular Technology
Society Chapter

IEEE New Jersey Coast
Communications Society
Chapter

IEEE New Jersey Coast
AP/VT/EMC Societies Joint
Chapter

IEEE New Jersey Coast
Computer Society Chapter

IEEE Princeton/Central
Jersey Computer,
Communication Society
Chapter

CTIF-USA

The **2nd IEEE North Jersey Advanced Communications Symposium** will be held at the Babbio Center, Stevens Institute of Technology, in Hoboken, NJ, on Saturday, September 20, 2014. The symposium is being organized by the IEEE North Jersey Section and its Communications, Computer, Information Theory and Vehicular Technology Chapters. The symposium consists of six invited presentations as well as poster sessions by graduate students and postdocs, covering advanced topics in communications, including small cells, internet-of-things, self-organizing networks and software defined networks. There will be plenty of opportunity to interact with presenters and network with peers at the coffee breaks, during the lunch break and at the closing reception.

The organizing committee is **currently inviting graduate students and postdocs** to prepare a poster presentation on recent research works, and cutting edge developing technologies in communications and related fields. Master students, PhD students and postdocs are all encouraged to participate. The poster session will be particularly helpful for student researchers to have direct interactions with faculty, industry researchers and regional IEEE officers and volunteers. This will serve as an excellent platform and opportunity to network for future collaborative research and career advancement.

Poster presentations will be on display all day and special dedicated exhibition times are scheduled for all attendees. Presenters will have opportunities to interact with all attendees. There will be two categories of poster awards: the **2014 IEEE North Jersey Section Wireless Communications Poster Awards** and the **2014 IEEE North Jersey Section Data Networking Poster Awards**. All submissions will be subject to review by the organizing committee. The first, second, and third place winners will receive prizes of **\$200/\$150/\$100** respectively (one prize per winning poster). All poster presentations will receive participation certificates.

If interested, please submit a title and an extended abstract (up to 250 words) to the poster session coordinator Prof. Hong Man at hong.man@stevens.edu by **August 31, 2014**. If accepted, presenters will be notified one week later. For posters that are selected for presentation at the event, the following guidelines shall be used to prepare the poster. All posters will be mounted using push pins onto presentation boards and posters may be no larger than 32 inches wide and 48 inches long. The electronic version of the selected poster is due on **September 14, 2014**. For any additional questions, please contact Prof. Hong Man.

Registration - Symposium	until Sep. 14, 2014	after Sep. 14, 2014
IEEE member	\$ 25.00	\$ 35.00
IEEE student/graduate student/life member	\$ 15.00	\$ 20.00
Non-member	\$ 40.00	\$ 50.00
Non-member (student/graduate student)	\$ 25.00	\$ 30.00

For more information and registration, please check: <http://sites.ieee.org/northjersey/events/2014-njacs>





THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.
IEEE NORTH JERSEY SECTION

MTT-Society and AP-Society Joint Chapter
 PRESENTS

29th ANNUAL SYMPOSIUM AND MINI-SHOW

FOCUS:

**SELECTED TOPICS IN RF AND MICROWAVE TECHNOLOGIES FOR
 COMMERCIAL AND MILITARY APPLICATIONS**

DATE: THURSDAY OCTOBER 2, 2014

PLACE: Hanover Manor, 16 Eagle Rock Ave., E. Hanover, NJ 07936. Ph# 973-992-7425

SCHEDULE OF EVENTS

9:00 AM TO 4:30 PM

TECHNICAL SESSIONS

**10 –12 LECTURES FEATURING SPEAKERS FROM LEADING
 COMPANIES, WITH EMPHASIS ON MILITARY ELECTRONICS,
 WIRELESS TECHNOLOGIES AND MICROWAVE COMMUNICATIONS**

MINI SHOW FEATURING LATEST PRODUCTS

(APPX. 30-40 EXHIBITORS)

(COMPLIMENTARY LUNCH SERVED)

**Details of the schedule and speakers and the topics will be posted on the IEEE North Jersey Section Home page
<http://www.ieee.org/go/njsection> by September 2014.**

For further information contact:

CHAIR-EXHIBITION: KIRIT DIXIT (201-669-7599), kdixit@ieee.org

PUBLICITY: ARTHUR GREENBERG, gardner1@optonline.net

EVENT/ LOCATION CO-ORDINATOR: KEN OEXLE (973-386-1156) k.oexle@verizon.net

CO-CHAIR- TECHNICAL PROGRAMS: HAR DAYAL, dayalhar@gmail.com

CO-CHAIR - TECHNICAL PROGRAM: GEORGE KANNELL, (973-437-9990), gkk@lgsinnovations.com

CHAPTER CHAIR: Dr. AJAY PODDAR, akpoddar@synergymwave.com

CHAPTER VICE-CHAIR: Dr. EDIP NIVER, edip.niver@njit.edu

SECTION CHAIR: RUSSELL PEPE, rpepe@att.net

THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW

IEEE North Jersey Section

IEEE North Jersey Section Membership Development (MD), Young Professionals (YP), Women In Engineering (WIE), and Professional Activities Committees for Engineers (PACE) present:

Art of Speechcraft - Returns to Murray Hill

Tuesdays, October 7 through November 25, 2014
Seven weekly classes (October 7, 14, 21, 28, November 4, 11, 18, 25, 2014)
Bell Laboratories, Alcatel-Lucent, 600 Mountain Avenue in Murray Hill, NJ 07974

Are you nervous about an upcoming presentation? Want to increase your confidence in communication? The Toastmasters clubs of Murray Hill are once again offering our popular seminar series on the art of Speechcraft. In this 8-week seminar series, you will learn techniques to improve your ability to deliver both written and impromptu speeches through live practice with Toastmasters advisors committed to helping you succeed as a speaker and develop your confidence. Techniques like speech organization, body language, and vocal variety will help you enhance your personal presence.

About the Toastmasters Clubs of Murray Hill:

Cosmopolitan Toastmasters and the Murray Hill Speakers Club have been helping employees as well as members of the community polish their speaking and leadership abilities for over half a century!

Cosmopolitan Toastmasters meets the 2nd and 4th Tuesdays of each month from 12pm – 1pm

Murray Hill Speakers Club meets on odd (first, third and fifth, if any) Thursdays from 12:10p m to 1:10 pm while on even (second and fourth) Thursdays, the club meets from 5:30 pm to 6:30 pm. All guests are welcome to both clubs

. Check the club websites on the web for contact information.

A nominal fee of \$20 to cover the cost of materials is required (yes, only \$20 for all 8 sessions!). Space is very limited.

WHERE: Bell Laboratories, Alcatel-Lucent, Main Building, Room: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)

WHEN: 8 Tuesdays, October 7, 14, 21, 28, November 4, 11, 18, 25, 2014, 5:30 PM to 7:30 PM

COST: \$20.

CONTACT: Mani Iyer mani.iyer@ieee.org

REGISTRATION: <https://meetings.vtools.ieee.org/m/28039>

Name: _____ Email address _____

Non-member

IEEE Member Member #: _____

Employer: _____

Employer Address: _____

Home Address: _____

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

2014 IEEE North Jersey Section Volunteer

Executive Committee

Chair - Russell Pepe
rcepe@ieee.org

1st Vice-Chair – Adriaan van Wijngaarden
avw@ieee.org

2nd Vice-Chair – Ajay Poddar
akpoddar@synergymwave.com

Secretary - Chris Peckham
cdp@ieee.org

Treasurer - Kalyan Mondal
mondal@fdu.edu

Member-at-Large

Mengchu Zhou – zhou@njit.edu

Goran Djuknic – gd@ieee.org

John C Taylor –
john.taylor1204@gmail.com

Junior Past Chair – Naresh Chand
chandnaresh@gmail.com

Senior Past Chair – Amit Patel
a.j.patel@ieee.org

Society Chapters

Aerospace Electronic Systems Society

Chair – Goran Djuknic
gd@ieee.org

Vice-Chair – Naresh Chand
chandnaresh@gmail.com

Antennas and Propagation / Microwave Theory and Techniques Society

Chair - Ajay Poddar
akpoddar@synergymwave.com

Vice-Chair – Edip Niver
niver@adm.njit.edu

Circuits and Systems Society / Electron Devices Society

Chair - Durga Misra
dmisra@njit.edu

Communications Society

Chair - Amit Patel
a.j.patel@ieee.org

Computer Society

Chair - Hanna (Hong) Zhao
zhao@fdu.edu

Controls Society

Chair - David Haessig
davidhaessig@ieee.org

Engineering in Medicine and Biology Society

Chair - Raquel Perez-Castillejos
raquelpc@njit.edu

Industrial Applications Society

Chair - Ken Oexle
k.oexle@ieee.org

Information Theory Society

Chair – Adriaan van Wijngaarden
avw@ieee.org

Instrumentation Measurement Society

Chair – Emad Farag
enfarag@ieee.org

Photonics Society

Chair – Naresh Chand
chandnaresh@gmail.com

Power & Energy Society

Chair - Ronald W. Quade
rwquade@ieee.org

Signal Processing Society

Chair - Alfredo Tan
tan@fdu.edu

Systems, Man, and Cybernetics Society

Co-Chair – Mike Liechenstein
itsmikesju@aol.com

Co-Chair – Mengchu Zhou
zhou@njit.edu

Vehicular Technology Society

Chair - Mani Iyer
mani.iyer@ieee.org

Technical Councils

Technology Management Council

Co-Chair - Apratim Rajendra,
apratim.rajendra@nomura.com

Co-Chair Vaseem Ahmed,
vas201@gmail.com

Affinity Groups

Consultants Network

Chair - Peter Schutz
schutz@compuserve.com

Young Professionals

Co-Chair - Sean Kennedy
sean.kennedy@alcatel-lucent.com

Co-Chair - John C Taylor
john.taylor1204@gmail.com

Women in Engineering

Chair - Zhiwei Mao
zmao@fdu.edu

LIFE Members

Chair - Art Greenberg
a.h.greenberg@ieee.org

Committees

60th Anniversary Committee

Chair – Har Dayal
dayalhar@gmail.com

Awards/Recognition

Chair - Ken Oexle
k.oexle@ieee.org

Audit Committee

Chair - Fred Chichester
fdchichester@gmail.com

Education

Co-Chairs

Donald Hsu – yanyou@hotmail.com

Kalyan Mondal – mondal@fdu.edu

Mengchu Zhou – zhou@njit.edu

Employment Network

Chair - Suzanne McIntosh
skranjacmcintosh@yahoo.com

Government and Industry Relations Committee

Chair – Art Greenberg
a.h.greenberg@ieee.org

Group coordinator / History

Chair - Howard Leach
h.leach@ieee.org

Membership Development

Chair - Mani Iyer
mani.iyer@ieee.org
Vice-Chair - Ajay Poddar
akpoddar@synergymwave.com

MTT/AP Trade Show and Symposium

Chair - Kirit Dixit
kdixit@ieee.org

Vice-Chair – Har Dayal
dayalhar@gmail.com

TPC Co-Chair – George Kennall
gkk@lgsinnovations.com

TPC Co-Chair – Ajay Poddar
akpoddar@synergymwave.com

Newsletter

Chair - Anisha Apte
anisha_apte@ieee.org

Nominations

Chair – Amit Patel
a.j.patel@ieee.org

PACE

Chair - Richard Tax
rtax@verizon.net

Co-Chair – Paul E. Ward
peward@ieee.org

Pre-University Activities

Chair – Steve Majkowski
steve.majkowski@alcatel-lucent.com

Vice-Chair – Jesse Colby
jjc37@njit.edu

Student Activities

Chair -John C Taylor
john.taylor1204@gmail.com

Vice-Chair - Daniel Cerone
dcer@dcerone.com

Webmaster

Chair – Adriaan van Wijngaarden
avw@ieee.org

Industrial Liaison

Chair-Kirit Dixit
kdixit@ieee.org

Intersection activities

Chair- Amit Patel
a.j.patel@ieee.org

Legal Activities

Joel Miller
jm@joelmillerlaw.com