



THE IEEE NORTH JERSEY SECTION NEWSLETTER

Vol. 60, No. 5

MAY 2013

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Details, updates and registration for this event is available at: https://meetings.vtools.ieee.org/meeting_view/list_meeting/18523. We want to get everyone together for a fun night at a baseball game. If you have been thinking about becoming an IEEE Member, but have not done so yet, this would be a great place to make up your mind. There will be many Members from the IEEE North Jersey Section available to talk to you about IEEE Membership. Note that IEEE Membership for 2013 is now half price. Plus, we will offer a partial refund for anyone who signs up to become an IEEE Member at the game. If you are already an IEEE Member, and would like to elevate to Senior Member Grade, we can also help get you started, at the game. Whatever may be your reason for coming, just come to the game and have a good time.

Our next IEEE North Jersey Section EXCOM Meeting will be held at Alcatel-Lucent (Bell Labs) in Murray Hill on Wednesday, June 5 at 7:00 pm. Arrive at 6:00 pm for a free, pre-meeting buffet dinner. We are always looking for Volunteers to assist with Society and Committee activities. If you want to make a difference and be active in your Profession, come to the IEEE EXCOM meetings and be active. It is also a great place to network.

We are also planning an IEEE Senior Member Elevation Drive prior to the EXCOM meeting on June 5, at 5:30 pm. All are welcome.

You can register for the next EXCOM meeting on the IEEE vTools web site at:

https://meetings.vtools.ieee.org/meeting_view/list_meeting/15409

You can register for the Senior Member Elevation Drive on the IEEE vTools web site at:

https://meetings.vtools.ieee.org/meeting_view/list_meeting/17774

We also want to make you aware of the upcoming IEEE Career Advancement Workshop, which is held at the FDU Metropolitan Campus in Hackensack, NJ on May 18, 2013. More information on this event can be found at: <http://sites.ieee.org/metsac/events/2013-caw>

Stay in touch. Send me an e-mail at: rcpepe@ieee.org.

As I always say, my e-mail is always open.

Sincerely,

Russell C. Pepe
Chair, IEEE North Jersey Section
201-960-6796
rcpepe@ieee.org

A Note from the Chair

Russell C. Pepe

Chair, IEEE North Jersey Section

If you have never attended the IEEE North Jersey Section Awards Banquet, you have been missing out on a prodigious event. It is your chance to meet and celebrate the newly honored IEEE Fellows and Region 1 Award recipients. It is an excellent chance to mingle with your IEEE colleagues and make new acquaintances. Moreover, it is an enjoyable event with great food and company. It is a time to relax, unwind, enjoy and pay tribute. Please join us and do not miss out. You can still register on the IEEE vTools web site at: https://meetings.vtools.ieee.org/meeting_view/list_meeting/15407.

We have finalized our Membership Drive. All are welcome-Members, Non-Members and those interested in becoming Members.

We have reserved a box for a Somerset Patriots Baseball Game in Somerset, NJ for Saturday, June 8, 2013 at 7:00 pm. We want to get everyone together for a fun night at a baseball game.

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MAY 2013

Calendar of Events

- May 1, 8:00 AM to 4:00 PM: Computer Society & FDU – Symposium on Advances in Cybersecurity and Information Assurance – Various Speakers**
Location: Wilson Auditorium, Dickinson Hall, Metropolitan Campus, Fairleigh Dickinson University, Teaneck, NJ 07666
[Getting to FDU](#)
Contact: Hong Zhao (201)-692-2350, (zhao@fdu.edu); Howard Leach (h.leach@ieee.org) [Read More...](#)
- May 5, 3:00 PM to 6:00 PM: IEEE North Jersey Section Awards Banquet**
Location: Building: Birchwood Manor, 111 North Jefferson Road, Whippany, New Jersey
[Getting to Birchwood Manor - Whippany](#)
Contact: Russell Pepe (rcpepe@ieee.org), Adriaan J. van Wijngaarden, (avw@ieee.org) [Read More...](#)
- May 8, 6:30 PM to 7:30 PM: IEEE TMC/MTT/AP - Patents and technology: Managing Protection for Your Products - Joel Miller**
Location: 201 McLean Boulevard, Paterson, NJ 07504 [Getting to Synergy Microwave Corporation](#)
Contact: Dr. Ajay Poddar (201)-560-3806 (akpoddar@synergymwave.com); Tony Almeida (alemeida@synergymwave.com)
[Read More...](#)
- May 8, 6:30 PM to 9:00 PM: IEEE PACE - Engineers Meet – The Legislative Side of the Engineers’ Career IEEE USA - Russ Harrison**
Location: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ 07011 [Getting to Clifton Library](#)
Contact: Paul Ward, (973)-790-1625, (peward@ieee.org) Richard F. Tax, (201)-664-6954 (rtax@aea.net) [Read More...](#)
- May 14, 6:30 PM to 7:30 PM: IEEE MTT/AP - Lossless Feedback for Power Amplifiers - George Vendelin**
Location: 201 McLean Boulevard, Paterson, NJ 07504 [Getting to Synergy Microwave Corporation](#)
Contact: Ajay Poddar (201)-560-3806 (akpoddar@synergymwave.com); Edip Niver niver@adm.njit.edu [Read More...](#)
- May 16, 7:00 PM to 9:30 PM: IEEE CNNNJ Networking Dinner Meeting**
Location: Olive Restaurant, One Hilton Court, Parsippany, NJ 07054, www.parsippany.hilton.com
Contact: Robert Walker at r.d.walker@ieee.org or 973-728-0344. Parsippany Hilton, 973-267-7373 [Read More...](#)
- May 18, 7:15 AM to 5:15 PM: IEEE Career Advancement Workshop**
Location: Wilson Auditorium, Dickinson Hall, Metropolitan Campus, 140, University Plaza Drive, Fairleigh Dickinson University, Hackensack, NJ 07666 [Getting to FDU](#)
Contact: Nikolas Golas, General Chair, ngolas@ieee.org, Robert Pellegrino, Program Chair and Registrations, bobpellegrino@ieee.org, Kalyan Mondal, Local Arrangements, mondal@fdu.edu, Adriaan J. van Wijngaarden, Registration and Publicity, avw@ieee.org, [Read More...](#)
- June 5, 5:30 PM to 6:30 PM: IEEE North Jersey Section Senior Member Drive 2013**
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Mani Iyer mani.iyer@ieee.org, Dr. Ajay K. Poddar (201)-560-3806 (akpoddar@synergymwave.com); [Read More...](#)
- June 5, 6:00 PM to 8:45 PM: IEEE North Jersey Section EXCOM meeting – Bell Labs, Murray Hill, NJ**
Location: Clifton Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Russell Pepe (rcpepe@ieee.org), Chris Peckham cdp@ieee.org and/or Adriaan J. van Wijngaarden, (avw@ieee.org)
[Read More...](#)
- June 8, 6:30 PM to 11:00 PM: IEEE North Jersey Section Social Event and Membership Drive – Somerset Patriots Game and Fireworks**
Location: TD Bank Ballpark, 1 Patriots Park, Bridgewater, NJ 08807
Contact: Russell Pepe (rcpepe@ieee.org), John C Taylor (john.taylor1204@gmail.com), Adriaan J. van Wijngaarden, (avw@ieee.org) [Read More...](#)

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](#) or visit [Webinabox.vTools](#)

**PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
Congratulations to the winners of the Annual student Paper Competition!**



From left to right: Prof. Mondal, Eduardo Reyes, Prof. Nancy Passow, Bill Coombs, Julia Silva, Mike Barry, and Prof. Silver

The annual student paper competition is an event where students from undergraduate and graduate present research projects to set of judges (mainly professors) that grade them for clarity, eye contact, content, and other criteria. The event has a two-fold purpose: to prepare students for the IEEE Region 1 Student Paper competition, and to serve as a means for students to work on their presentation skills. It is important for students to know that being able to communicate is an essential tool, both in the world of academia, the private sector, and the government, and to learn how to convey complex material in a simplified manner.

The winners are:

Undergraduate Students:

- First Prize Bill Coombs
- Second Prize Mike Barry
- Third Prize Julia Silva

Graduate Students:

- First Prize Eduardo Reyes
- Second Prize Praveena Velagapudi
- Third Prize Kerron Manwaring

Meeting Announcements

May 1, 2013

IEEE Computer Society presents:

Symposium on Advances in Cybersecurity and Information Assurance

Speakers: Kevin A. Kwiat, Jungwoo Ryoo, William R. Beckett, Justin Cappos, Fred Carl, and Eamon Doherty.

Abstract: The Computer Society Chapter of IEEE North Jersey Section is co-sponsoring a Symposium on Cybersecurity and Information Assurance on May 1, 2013 in the Wilson Auditorium of the Metropolitan Campus. This forum will gather top security professionals from government, industry, and academia to present the current state of Cybersecurity affecting our daily lives.

Location: Wilson Auditorium, Dickinson Hall, Metropolitan Campus, Fairleigh Dickinson University, Teaneck, NJ 07666
[Getting to FDU](#)

Time: 8:00AM to 4:00 PM

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

Admission is free and registration is necessary to attend this event. To learn more and register for the symposium, please visit http://fdu.edu/2013_cybersecurity_symposium

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

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May 5, 2013

IEEE North Jersey Section Awards Banquet

The annual IEEE North Jersey Section Awards Banquet will be held on Sunday, May 5, 2013 at the Birchwood Manor, in Whippany, New Jersey.

A time to relax, unwind and enjoy –

A time to pay tribute to our new Fellows –

A time to honor our Award Winners –

The Annual Section IEEE Awards Reception will be held at: The Birchwood Manor, 111 North Jefferson Road, Whippany this year. The Awards Banquet is scheduled for Sunday, May 5, 2013 from 3 pm to 6 pm. Spouses and guests are welcome. Tickets are \$35 per person. The capacity of the location is 90 persons, so please make your reservations early. Please use the vTools link to make the reservation. Please register all persons by completing the name, address, and e-mail entries on the form. Payments can be made through vTools, or by sending a check, payable to the IEEE North Jersey Section, with your name(s), address and e-mail to Russell Pepe, 43 Rambling Drive, Scotch Plains, NJ 07076. We will send you a confirmation e-mail upon request.

For more information, please contact Adriaan J. van Wijngaarden (avw@ieee.org).

Location: Building: Birchwood Manor, 111 North Jefferson Road, Whippany, New Jersey, [Getting to Birchwood Manor](#)

Time: 3:00 PM to 6:00 PM

Contact: Ken Oexle, Awards Committee Chair,

Russell Pepe, Chair (rcpepe@ieee.org),

Adriaan van Wijngaarden, First Vice-Chair (avw@ieee.org)

[Click Here: For Registration and Updates for the IEEE North Jersey Section - Awards Banquet – 2013](#)

Alternatively, please mail the completed registration below, with a check (payable to “IEEE North Jersey Section”) to: Russell Pepe, IEEE North Jersey Section, 43 Rambling Drive, Scotch Plains, NJ 07076.

Name: _____

Email address _____

Non-member IEEE Member

Member #: _____

Business (day) telephone #: _____

Home Address: _____

Home telephone #: _____

Signature: _____

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May 8, 2013

IEEE TMC and MTT/AP-S present:

Patents and Technology: Managing Protection for your Products

Speaker: Joel Miller, Esq.

Abstract: Working with a hypothetical, new product, we will explore various options for protecting the product and its design (i.e., with patents, trade secrets, copyrights, and trademarks) and discuss how you would employ them. Our goal will be to develop a comprehensive strategy for the protection and management of the technology. We will also consider how to best manage a portfolio of patents, trademarks, copyrights, and trade secrets. Everyone will have an opportunity to participate in the discussion.

Biography: Joel Miller specializes in patent, trademark, copyright, unfair competition, and antitrust law. Mr. Miller’s practice involves securing patents, trademarks, and copyrights, litigation, and licensing. He has worked in a variety of technologies including telecommunications, semiconductors, avionics, medical electronics, and computer hardware and software.

Following graduation from law school, Mr. Miller served as a patent examiner in the U.S. Patent and Trademark Office, examining patent applications in the fields of telemetry, digital display systems, and computers. He also served as patent counsel and counsel for the Kearfott Division of the former Singer Company, handling patent matters, licensing, trade secret and export issues, and employment-related litigation. Prior to establishing his solo practice in 1991, Mr. Miller was associated with the law firm of Weil, Gotshal & Manges in

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New York City, where he worked on a variety of patent, trademark, and antitrust matters.

Before graduation from law school, Mr. Miller held engineering positions with Aerocom, Inc., Coral Gables, Fla. (ground-based avionics), the Federal Aviation Administration, Washington, D.C. (radar), and Research Cottrell, Inc. (pollution control), and has worked as a bench technician (high-frequency crystal filters), a draftsman, and as a licensed broadcast engineer (WEEX and WJRH, Easton, PA).

Mr. Miller is a member of the District of Columbia, New Jersey, and New York Bars, admitted to practice before the U.S. Patent and Trademark Office, and a Fellow of the American Bar Foundation. A member of the IEEE since 1973, he is the Legal Activities Chair for the IEEE's North Jersey Section. Mr. Miller is the author of the book, *The Patent Trial and Appeal Board: Advocacy and Practice*, covering appeals and trial proceedings in patent matters at the U.S. Patent and Trademark Office. He received a B.S. in Electrical Engineering from Lafayette College in 1975 and a J.D. from the University of Miami in 1978.

Email: jm@JoelMillerLaw.com

Address: West Orange, New Jersey, United States

Location: 201 McLean Boulevard, Paterson, NJ 07504
[Getting to Synergy Microwave Corporation](#)

Time: 6:30 PM to 7:30 PM:

All are welcome. You don't have to be IEEE member to attend the talk

Free dinner will be served at 6:15 PM.

Contact: Tony Almeida (alemeida@synergymwave.com)

Dr. Ajay Poddar (akpoddar@synergymwave.com);
(201)-560-3806,

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

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May 8, 2013

PACE presents: Engineers Meet – The Legislative Side of the Engineers' Career IEEE USA

Speaker: Russ Harrison, IEEE-USA's Washington Lobbyist

Abstract: IEEE-USA's Washington Lobbyist Russ Harrison will lead the discussion on Congress. He will explain what is going on in Congress today, and what engineers should expect in 2013. In particular, he will focus on H-1B visas, immigration and other jobs issues.

The business community is gearing up for a major effort to increase the number of H-1B visas next year. IEEE-USA is fighting back. Attend this meeting and learn how, and what the Section and individual engineers can do to help. Come and join other Section professionals for the talk and refreshments.

Meeting Agenda: The subject will be: IEEE-USA and Legislative Activities. This is a bonus: Not only do we get a great talk about IEEE-USA's activities, but also we get to meet Russell Harrison. Mr. Harrison is the Legislative Representative for Grassroots Activities for IEEE-USA

At this meeting we will meet to discuss Congress and how we can reach and influence our Congressional Representatives. IEEE-USA is coming to New Jersey. Russell T. Harrison, from Washington is our guest speaker.

Location: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ 07011 [Getting to Clifton Library](#)

Time: 06:30PM to 9:00PM

Contact: Paul Ward, (973)-790-1625, (peward@ieee.org)

Richard F. Tax, (201)-664-6954 (rtax@aea.net)

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

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May 14, 2013

IEEE MTT/AP presents:

Lossless Feedback for Power Amplifiers

Speaker: George Vendelin of National Taiwan University

Abstract: A novel lossless feedback method and technique for power amplifiers with feedback and improved output return loss is presented. The presentation outline is as follows:

- A brief overview of the theory on feedback power amplifiers
- A new feedback topology suitable for power amplifiers
- An example of a 2 GHz 800 mW power amplifier
- Feedback power amplifier
- High gain
- Good return loss
- High reverse isolation
- Maximum device output power

Biography: Dr. Vendelin graduated from Stanford University and worked as a Technical manager at Agilent Technologies (1985-1988), professor in US University (since 1976), including as a Visiting Professor at National Taiwan University, consultant of microwave Engineering projects, and CEO of Vendelin Engineering. He authored/co-authored four technical books, published over 100 papers, and holds several patents. Dr. Vendelin is an IEEE Life Fellow, as well as a Fellow of several other technical Societies, and is serving as an advisory committee member of technical societies worldwide.

Location: 201 McLean Boulevard, Paterson, NJ 07504
[Getting to Synergy Microwave Corporation](#)

Time: 6:00 PM to 7:30 PM:

Contacts: Ajay Poddar (201)-560-3806

(akpoddar@synergymwave.com)

Edip Niver (niver@adm.njit.edu)

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

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May 16,

IEEE CANNJ presents:

Networking Dinner Meeting

Meeting Agenda: CANNJ's May meeting will be a dinner meeting, preceded by an informal networking session for the participants.

Meet your fellow Network members, socialize, and find out about their interests, their capabilities, their projects. Promote yourself, increase your exposure!

Enjoy the company of like-minded individuals. Familiarity can be very beneficial – it may lead to contract assignments between members, discovery of outside leads, and increase in your knowledge about operating a consulting business.

Participate in a discussion about future direction of the Network. Provide your input about the function of the group and the scope of our activities.

The May meeting is open to all. Non-members, who are interested in our activities or who are considering joining the group, are strongly encouraged to participate, to socialize, to network and to gain insight into our organization.

Please see information about the venue, schedule and dinner cost, below.

ABOUT THE NETWORK

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and promotes the use of independent technical consultants by business and industry.

CANNJ INVITES YOU TO JOIN THE NETWORK

The IEEE Consultants' Network of Northern NJ invites all engineers engaged in independent practice to join its ranks. For more details on member benefits and on sign-on requirements, please visit our website at (www.TechnologyOnTap.org)

We will meet to network over dinner in the Olive Restaurant at the Parsippany Hilton, located off Route 10 West in Parsippany, NJ. The restaurant is situated on the south side of main atrium. At the restaurant we will avail ourselves of standard menu selections – with the participants responsible for their own charges, tax and gratuities. Since seating is limited, we ask that you contact us as soon as possible to reserve a seat, even if not participating in the dinner.

Location: Olive Restaurant at the Parsippany Hilton, One Hilton Court, Parsippany, NJ 07054 (located off Route 10W). The restaurant is situated on the southern side of the main atrium. See also: www.parsippany.hilton.com.

Time: 7:00 PM to 9:30 PM:

Contact: Robert Walker at r.d.walker@ieee.org or 973-728-0344. Parsippany Hilton, 973-267-7373 [Read More...](#)

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

If possible, RSVP by Monday, May 13. Late registrants will be accommodated only if space permits.

Dinner: at cost; Meeting participation: free.

May 18, 2013

IEEE Career Advancement Workshop

The IEEE Career Advancement Workshop provides practical and powerful strategies to maximize your career talents, to build and perfect your personal brand, and to communicate your brand in cover letters and resumes, and during interviews. The workshop includes a keynote address from Dr. Peter Staecker, the 2013 IEEE President and CEO, and features three morning sessions on creating a resume that gets you hired, interview skills, and an invited presentation by Carl Selinger, the author of "Stuff You Don't Learn in Engineering School". The afternoon sessions concentrate on essential skills to thrive in the workplace, and for effective networking. The workshop concludes with a panel discussion.

Registration Information

The registration fees for this workshop are as follows:

IEEE Member	by May 10, 2013	\$ 40.00
	after May 10, 2013	\$ 50.00
Student Member	by May 10, 2013	\$ 25.00
	after May 10, 2013	\$ 35.00
Life Member	by May 10, 2013	\$ 25.00
	after May 10, 2013	\$ 35.00
Non-Member	by May 10, 2013	\$ 55.00
	after May 10, 2013	\$ 65.00

For IEEE members, please enter your membership number and select the registration fee for the correct grade (the system makes a distinction between life member, life senior member, and life fellow grade).

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](#).

Location: Wilson Auditorium, Dickinson Hall, Metropolitan Campus, 140, University Plaza Drive, Fairleigh Dickinson University, Hackensack, NJ 07666 [Getting to FDU](#)

Time: 7:15 AM to 5:15 PM

Contacts:

Nikolaos Golas, General Chair (n.golas@ieee.org)

Robert Pellegrino, Program Chair/Registrations, (bobpellegrino@ieee.org)

Kalyan Mondal, Local Arrangements (mondal@fd.edu)

Adriaan J. van Wijngaarden, Registration and Publicity (avw@ieee.org)

[For Updates and Registration - Click here](#) or visit <http://sites.ieee.org/events/2013-maw>

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June 5, 2013**IEEE North Jersey Section Senior Member Drive 2013**

Meeting Agenda: Facilitate completion of the application process to be elevated to Senior Member of the IEEE.

If you have not started your senior membership application yet, start now and have your references completed by mid-June to be ready for review by the IEEE Senior Member selection-review-panel, by the end of June 2013

For senior member requirements please visit:

http://www.ieee.org/membership_services/membership/senior/senior_requirements.html

For the application please visit:

http://www.ieee.org/membership_services/membership/senior/senior_application.html

If you are having trouble finding that last senior member reference, bring printed out hardcopies of your full resume and senior member application portfolio with you to the meeting for review by other senior members and to find that last reference. Registration link is below.

All section members are invited to attend, especially those who are current senior members and are willing to volunteer as references, and any of those interested in becoming more active in general IEEE activities, volunteering, or those seeking senior membership. If you are interested in serving as a reference contact our membership development chair at this address: northjerseymembership@yahoo.com or mani.iyer@ieee.org and register below in VTOOLS.

The event will be held on Wednesday, June 5, 2013, 5:30-6:30PM, there will be a free buffet dinner and an opportunity to network with section members. Seating is limited and registration is required for all.

The meeting will take place 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.

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

Time: 05:30PM to 06:30PM

Contact: Mani Iyer mani.iyer@ieee.org

Dr. Ajay K. Poddar poddar_ajay@yahoo.com

No Admission Charge.

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

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June 5, 2013**IEEE North Jersey Section EXCOM meeting – Murray Hill, NJ**

This executive committee (EXCOM) meeting of the IEEE North Jersey Section 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 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.

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 and the North Jersey Section, planning and new initiatives.

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 08:45PM

6:00 pm - 7:00 pm - Get-together and Buffet

7:00 pm - 8:45 pm - Meeting

No Admission Charge

Contact: Russell Pepe (rcepe@ieee.org),

Chris Peckham (cdp@ieee.org)

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

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

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June 8, 2013**IEEE North Jersey Section GOLD, MD, SAC, PACE, WIE present:****Social Event and Membership Drive – Somerset Patriots Game and Fireworks**

The IEEE North Jersey Section is organizing a social event and membership drive. We want to get everyone together for a fun night at a baseball game with fireworks. All are welcome — members, non-members, and those who are interested to become members. We have reserved a box for a Somerset Patriots Baseball Game in Bridgewater, NJ, on Saturday, June 8, 2013. The game, Somerset Patriots vs. Sugarland Skeeters, will start at 7:05 pm, and there will be fireworks afterwards. Please register using the link below if you would like to join us for the game.

The fee for this event is only \$10, and includes a seat in our special IEEE box, plus a \$10 food and beverage voucher.

If you have been thinking about becoming an IEEE Member, but have not done so yet, this would be a great place to make up your mind. There will be many Members from the IEEE North Jersey Section available to talk to you about IEEE Membership and the IEEE North Jersey activities. Note that IEEE Membership for 2013 is now half price (regular member: \$94, student member: \$16, see <http://www.ieee.org/join>). Plus, we will offer a partial refund (\$10) for anyone who signs up to become an IEEE Member at the game. If you are already an IEEE Member, and would like to elevate to Senior Member Grade, we can also help get you started, at the game. Whatever may be your reason for coming, just come to the game and have a good time.

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Location: TD Bank Ballpark, 1 Patriots Park, Bridgewater, NJ 08807

Time: 6:30PM to 11:00PM

Contact: Russell Pepe (rpepe@ieee.org), John C Taylor (john.taylor1204@gmail.com), Adriaan J. van Wijngaarden, (avw@ieee.org)

Admission fee applies

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

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North Jersey Section Employment Network Announcement

We have kicked off the 2013 Employment Network with a LinkedIn group where unemployed members who seek jobs can share leads and discuss job search strategies.

Once established, our network will hold online and face to face meetings with technical presentations and seminars to assist job seekers in targeting their skills to succeed in this job market.

Join our network by sending an email to Suzanne McIntosh (chair), at skranjac@us.ibm.com

Suzanne will be happy to add you to our LinkedIn group, "IEEE North Jersey Section Employment Network".

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Welcome! New Members of the IEEE North Jersey Section

First Name, Last Name	IEEE Current Grade Description
Victor Aladele	Student Member
Sadia Akhter	Graduate Student Member
Adel Aldalbahi	Graduate Student Member
Metin Botas	Student Member
Hong Cai	Member
Damen Chan	Member
Evan DeFilippo	Student Member
Nikesh Dhunju	Student Member
Eric Dieter	Student Member
Vishnu Dosakayala	Student Member
Alexandra Dryer	Student Member
Elika Fallah	Graduate Student Member
Ronald Forson	Student Member
Stephen Gallo	Student Member
Angel Guerrero	Student Member
David Happe	Student Member
Marie Hunter	Associate Member
Mihir Kasvala	Student Member
Sehwan Kim	Student Member
De Kong	Member
Lai Lai	Student Member
Brian Lambariello	Member
Nigel Lui	Member
Shoufu Luo	Graduate Student Member
Margaret Majkowski	Member
Towsif Mamnoon	Student Member
Ryan Mohr	Student Member
Ranjit Nair	Graduate Student Member

Sebastian Nilsson	Student Member
Patrick O'Brien	Member
Aimee Palleschi	Student Member
Nathaniel Perez	Student Member
John Plavier	Graduate Student Member
Georgios Portokalidis	Member
Mac Russell	Student Member
Awad Shilby	Student Member
Stefania Samojlik	Student Member
Kenneth Sayles	Student Member
Wesley Sohail	Student Member
Kleber Solano	Student Member
Shao-Fu Sung	Graduate Student Member
Joseph Temowo	Graduate Student Member
Kevin Tiu	Member
Iraklis Tsekourakis	Graduate Student Member
David Warren	Graduate Student Member
Chao Yang	Graduate Student Member
Yuchen Yang	Graduate Student Member
Ruolin Zhang	Graduate Student Member
Diego Agudelo	Student Member
Raymond Cotay	Student Member
David Yee	Member

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

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

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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](#)

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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 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 business 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

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times and locations. Some committees needing volunteers include the following.

Please contact the person indicated for additional information.

GOLD (Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed –

Contact: sean.kennedy@alcatel-lucent.com

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

Contact: 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: zhao@fdu.edu-

Technical Management Council Committee Volunteers –

Contact: almeida@synergymwave.com

North Jersey Section Awards Committee Volunteers –

Contact: k.oexle@ieee.org

Membership Development Committee Volunteers –

Contact: 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.

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Job Posting

Be advised that the Amtrak Engineering Management Associate positions are now posted on the internet.

Please share with any interested graduating students.

All applicants must apply via the Amtrak Internet Portal Amtrak external job site:

<https://careers.amtrak.com/irj/portal/anonymous>

* This job site seems to work best when using Internet Explorer as opposed to Safari, Firefox or Chrome.

* Applicants need to make sure that their profile and job applications are "released" before they log off.

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Jonathan Avila – President

IEEE Student Branch of NJIT

ECE Study Lounge (FAC 104B)

<http://clubs.njit.edu/ieee>

ieee.njit@gmail.com

September 21, 2013

Wireless Communications Symposium

The IEEE North Jersey Section, ComSoc, Computer and VTS Chapters are organizing a one-day technical symposium covering wireless communication topics this fall. The Section's and Chapters' primary goal is to provide a local event that is focused on bringing value to local engineers working in the field and local graduate students doing research. With increasing pressure on time and travel, budgets for conference attendance, this activity will be hosted at a local venue within easy reach. It will also give advanced students a chance to showcase their work and all participants an opportunity to learn what is happening now.

The event will be held on Saturday, September 21, 2013 at the Babbio Center, Stevens Institute of Technology in Hoboken, NJ. The full-day program consists of invited talks given by distinguished speakers and it will also include a parallel poster session by invited graduate students. 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.

The organizing committee is currently inviting speakers who would like to give a 45-minute presentation followed by question and answers on recent work, recent research results, and cutting edge developing technologies in wireless communications. If interested, please reach out to the speaker coordinator Mani Iyer (mani.iyer@ieee.org).

The organizing committee is currently inviting graduate students who would like to present a poster on recent work, recent research results, and cutting edge developing technologies in wireless communications or other communication topics. Master students working on a thesis, PhD candidates, and post docs are encouraged to participate. There will be time-slots reserved for poster review by all attendees. If interested, please reach out to the poster session coordinator Hong Man (hong.man@stevens.edu).

General audience members are invited to participate and register online to save their seats.

More information will be made available at:

https://meetings.vtools.ieee.org/meeting_view/list_meeting/18497

Please register if you are interested to attend and if you would like to receive updates. The actual registration for the event will be opened later on using vTools.

If you have any questions, need additional information, or would like to volunteer or participate in the symposium, contact the General Chair or appropriate members of the organizing committee.

General Chair

Amit Patel

a.j.patel@ieee.org

Speaker Coordinator

Mani Iyer

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Poster Session Coordinator

Hong Man

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Yu-Dong Yao

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Adriaan J. van Wijngaarden

avw@ieee.org

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Model-Based Design

David Haessig

The term Model-Based Design (MBD) refers to a design process involving models developed not only for the purpose of dynamic simulation, but also for generation of executable code. The model therefore includes the embedded algorithm being developed, and a dynamic model governing the behavior of the system containing the algorithm. In this way, that part of the model surrounding the algorithm acts as a test bench -- providing stimulus and reacting to outputs. MBD is supported to different degrees by several tool vendors, including Agilent's SystemVue, National Instrument's LabVIEW, VisSim, Python, MathWorks, and others.

A course entitled 'Model-based DSP on FPGAs' will be offered by the IEEE North Jersey Chapter. This will be a course on the use of Altera's DSP Builder for the design of algorithms and firmware for Field Programmable Gate Arrays (FPGAs). It provides an introduction to the MathWorks product Simulink, and to the Altera tools Quartus II and DSP Builder. Lab exercises will be performed using the Terasic DE0-Nano development board and will include development of a MAC, FFT, DDC and NCO. After completing the class attendees will be able to (1) develop complete FPGA designs for stand-alone operation on target platforms, (2) produce VHDL sub-modules for integration into larger FPGA designs, and (3) perform Hardware in the Loop (HIL) cosimulation.

The course also provides a brief description of several projects that have benefited by the use of MBD. These projects, spanning a wide range of application areas including software defined radio, antenna pointing while on-the-move, and radar cable detection, are further described for those interested in a recorded virtual conference accessible [here](#) (see right panel).

The outline of the course is as follows:

- *Intro to model-based design*
- *Intro to Simulink for dynamic system simulation*
- *Quartus II*
- *Altera DSP Builder Standard Blockset*
 - *Design flow*
 - *In class labs (MAC, Pin constraints, FFT)*
 - *Designing with IP library blocks*
 - *HIL cosimulation*
- *Altera DSP Builder Advanced Blockset*
 - *Advanced vs. Standard Blocksets*
 - *Build of multichannel/multirate systems (vectorization)*
 - *Latency management*
 - *Combined Standard & Advanced Blockset models*
 - *In class labs (DDC, NCO)*

Familiarity with Matlab is assumed. Students come with their own laptop running Windows XP or 7, with the 64-bit or 32-bit versions of Matlab and Simulink installed. Acceptable versions include 2010a, 2010b, 2011a, 2011b, and 2012a. Although not required but recommended to take full advantage of the course -- Simulink Fixed Point is required to use the Advanced Blockset, and the Communications Blockset is used on some Simulink examples.

The course consists of three 3-hour sessions that are best held over a 3 week span. A potential schedule is 6 to 9 PM, on June 12th, 19th, and 26th, Wednesday evening. We are currently looking for a suitable venue and convenient location. Individuals interested in taking this class should contact David Haessig (davehaessig@ieee.org) with venue and schedule suggestions prior to May 20th.

2013 IEEE North Jersey Section Volunteers

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