



THE IEEE NORTH JERSEY SECTION NEWSLETTER

Vol. 59, No. 10

NOVEMBER-DECEMBER 2012

We regret the delayed publication of the November 2012 issue and are having a combined publication for the months of November 2012 and December 2012

We hope that everyone is safe and recovering after Super storm Sandy

Reminders and Announcements

- Welcome! New Members of the IEEE North Jersey Section
- North Jersey Section Nomination Committee 2013 Officer Ballot
- How to subscribe to this newsletter if you are not a North Jersey IEEE Member?
- A Glance at the IEEE North Jersey Section – Nov. 2012

Meeting Announcements

November 12, 2012

Photonics Society and Aerospace & Electronics Systems Society present:

Tutorial: Introduction to Linear Photonics (Sending RF/Microwave over Fiber)

Speaker 1: John MacDonald, Vice President and General Manager of Linear Photonics, L.L.C.

Speaker 2: Dr. Allen Katz, a professor of Electrical/Computer Engineering at The College of New Jersey, Founder and President of Linearizer Technology, Inc, which now includes Linear Photonics, LLC and Linear Space Technology, LLC.

Location: Futurewei (Huawei) Technologies, 2nd floor, China meeting room, 400 Crossing Blvd. Bridgewater NJ

All are welcome. A free buffet dinner will be provided.

Time: 5:00 pm to 7:30 pm

Contact: Naresh Chand (naresh.chand@huawei.com) or (908) 723 7001.

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

November 14, 2012

IEEE North Jersey Section EXCOM meeting – Bell Labs, Alcatel-Lucent, 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.

The meeting will take place 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.

Location: Building: Bell Laboratories, Alcatel-Lucent, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974

[Getting to Bell Labs](#)

Time: 6:00 pm to 8:45 pm

Contact: Naresh Chand (nchand@ieee.org) and/or Adriaan van Wijngaarden (avw@ieee.org).

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

November 14, 2012

PACE presents:

ENGINEERS MEET – A Search for New Ideas Plus Conversation and Hospitality

Location: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ 07011

Pizza and refreshments during a mid meeting break.

Time: 6:30pm to 9:00pm

Contact:

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

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

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

November 15, 2012

School of Computer Sciences and Engineering, FDU presents:

Machine-to-machine communications and the Internet of Things: The next big thing is many little things

Speaker: Dr. Harish Viswanathan, Alcatel-Lucent

Location: Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, Teaneck, NJ 07666

[Getting to FDU](#)

Time: 12:00 pm to 1:00 pm

Contact: Hong Zhao (201)-692-2350, zhao@fdu.edu;

Howard Leach h.leach@ieee.org

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

November 20, 2012

School of Computer Sciences and Engineering, FDU presents:

Making Video Processing Greener

Speaker: Prof. Dr. Ricardo L. de Queiroz, Computer Science Dept., Universidade de Brasilia

Location: Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, Teaneck, NJ 07666

[Getting to FDU](#)

Time: 11:00 am to 12:00 pm

Contacts: Alfredo Tan, tan@fdu.edu ;

Hong Zhao, zhao@fdu.edu

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

November 20, 2012

COMSOC presents:

Distinguishing Users with Capacitive Touch Communication

Speaker: Marco Gruteser, Associate Professor of Electrical and Computer Engineering at Rutgers University and a member of the Wireless Information Network Laboratory (WINLAB)

Location: NJIT, ECE 202, Newark, NJ 07102

[Getting to NJIT](#)

Time: 5:00 pm to 6:15 pm

Contact: Nirwan Ansari (973)596-3670.

[Click here to visit COMSOC website for the latest updates.](#)

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

December 3, 2012

IEEE Consultants Network of Northern NJ announces:

Dinner and Annual Planning Meeting -

ALL ARE WELCOME!

Location: Olive Restaurant, Parsippany Hilton,

One Hilton Court, Parsippany, NJ 07054

www.parsippany.hilton.com, (973-267-7373)

If possible, RSVP for dinner by Monday, November 26.

Late registrants will be accommodated only if space permits.

[Directions to Parsippany Hilton](#)

Time: Dinner: 7 – 8:15 pm

Meeting: 8:15 – 9:30 pm

Contact: Robert Walker at r.d.walker@ieee.org or 973-728-0344.

[For Details, Updates and Registration – Click Here](#)

December 5, 2012

IEEE SP Chapter and SMC Chapter present:

Seminar on SVM Classification via Convex-Concave Hull

Speaker: Dr. Xiaou Li, Professor, Department of Computer Science, The Research and Advanced Studies Centre of the National Polytechnic Institute (CINVESTAV-IPN), Mexico.

Location: NJIT, ECEC Room Number: 202, Newark, NJ

[Getting to NJIT](#)

Time: 6:30 pm to 7:30 pm

Contact: Yun Q. Shi shi@njit.edu,

Mengchu Zhou zhou@njit.edu

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

December 7, 2012

IEEE SMC Chapter presents:

Seminar on DYMOND: An Active System for Dynamic Vertical Partitioning of Multimedia Databases

Speaker: Dr. Xiaou Li, Professor, Department of Computer Science, The Research and Advanced Studies Centre of the National Polytechnic Institute (CINVESTAV-IPN), Mexico.

Location: NJIT, ECEC Room Number: 202, Newark, NJ

[Getting to NJIT](#)

Time: 11:20 am to 12:30 pm

Contact: Mengchu Zhou zhou@njit.edu,

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

December 13, 2012

IEEE SMC Chapter presents:

From Individuals to a Swarm: How Much Can We Control?

Speaker: Dr. Wenfeng Li, Professor at the School of Logistics Engineering, Wuhan University of Technology, Wuhan, China and now a visiting professor at New Jersey Institute of Technology.

Location: NJIT, ECEC Room Number: 202, Newark, NJ

[Getting to NJIT](#)

Time: 11:30 am to 12:30 pm

Contact: Mengchu Zhou: zhou@njit.edu

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

Welcome! New Members of the IEEE North Jersey Section

Last Name, First Name	IEEE Grade
Agha, Goher I	Graduate Student Member
Ambre, Milind Vasant	Member
Anzalone, Justin Anthony	Student Member
Balaraman, Ramkumar	Graduate Student Member
Banini, Walter	Student Member
Basith, Nahia	Student Member
Bevacqua, Nicholas	Student Member
Bichalski, Bartlomiej	Student Member
Binmahfooz, Abdullah Saleh	Graduate Student Member
Briones, Miguel	Student Member
Bu, Tian	Member
Chakdor, Tenzin	Student Member
Chan, Barish	Graduate Student Member
Clarke, Daniel Joseph	Student Member
Cregan, Steven Patrick	Student Member
Das, Abhijeet	Graduate Student Member
Decker, Jilyan	Student Member

Devine, Dan	Student Member
Duarte, Kevin	Student Member
Eastman, Louis Steven	Student Member
Edsall, Laura	Student Member
Eisenstein, Michael	Member
Elsaied, Mohamed	Student Member
Emnas, Luke	Student Member
Fernandes, Brian	Student Member
Garcia, Luis E.	Student Member
Joseph, Justin	Student Member
Kui, Kwok	Graduate Student Member
Kumari, Akanksha	Student Member
Lauture, Guy Thomas	Student Member
Leung, Russell	Student Member
Lewis, Monique Michelle	Member
Majmundar, Shailendra	Graduate Student Member
Malyslava, Hanna	Student Member
Marianovsky, Nathan	Student Member
McGrath, Greg	Student Member
McGuire, Thomas	Student Member
Mendez, Lennys	Student Member
Miglio, Eugene	Student Member
Morales, Carlos M.	Student Member
Moux, Marilyn	Member
Murphy, Brian Joseph	Student Member
Olavarrieta, Angel L	Member
Patel, Vinay R	Graduate Student Member
Peralta, Melvin	Student Member
Philip, Lesley	Graduate Student Member
Phillips, Walter S	Graduate Student Member
Portnoi, Efim	Student Member
Procaccini, Chris	Member
Rodriguez, Eliezer J.	Graduate Student Member
Shah, Tarj	Student Member
Shanmugam, Venkat	Graduate Student Member
Sheehan, Luke Michael	Student Member
Sheep, Evgenia	Member
Shimada, Ty	Graduate Student Member
Singh, Shweta	Graduate Student Member
Solano, Robert	Student Member
Surti, Jaimin R	Graduate Student Member
Taranov, Adam	Student Member
Thomas, Val	Member
Tilak, Hershed	Student Member
Travilla, Matthew Panelo	Student Member
Wu, Yao	Graduate Student Member
Wang, Mengnan	Student Member
Wang, Qian	Graduate Student Member
Yuan, Chen	Graduate Student Member
Yarrapatni, Srikanth	Graduate Student Member
Zablitzky, Joseph Ryan	Student Member
Zaheer, Shahid	Graduate Student Member
Cooper, Dominique	Student Member
Dymko, David	Student Member
Manaev, Oleg	Graduate Student Member
Samaroo, Ray	Student Member
Zheng, Lu	Graduate Student Member

North Jersey Section Nomination Committee

2013 Officer Ballot

Instructions for Casting Ballots

Completed ballots should be mailed to the North Jersey Section Teller's Committee Chair address below. Alternatively, one can scan and e-mail the completed ballot to Durga Misra (dmisra@ieee.org).

Durga Misra
Electrical & Computer Eng Dept
New Jersey Institute of Technology
University Heights
Newark, NJ 07102

The ballot MUST be filled out completely with the member's name, membership number, date, and signature. The ballots are invalid without this information. Xerox copies of the ballot are acceptable as long as they are filled out completely. Ballots received after December 1, 2012 will not be counted.

Chairperson (choose one)

- Chairperson options: Russell Pepe, (Write-in)

Vice Chairperson-1 (choose one)

- Vice Chairperson-1 options: Adriaan J. van Wijngaarden, (Write-in)

Vice Chairperson-2 (choose one)

- Vice Chairperson-2 options: Ajay Poddar, (Write-in)

Secretary (choose one)

- Secretary options: Chris Peckham, (Write-in)

Treasurer (choose one)

- Treasurer options: Kalyan Mondal, (Write-in)

Members-At-Large (choose three)

- Members-At-Large options: Mengchu Zhou, Goran Djuknic, John Taylor, (Write-in), (Write-in), (Write-in)

Member Name, Member Number, Date

Signature

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 Kirit Dixit (kdixit@ieee.org) or Amit Patel (a.j.patel@ieee.org) and send in your nominations with your name, address, membership number, e-mail and position for which the nomination is desired.

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"

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



IEEE North Jersey Section Course

Model-Based DSP with FPGAs*A four session short course in January 2013**Location: New Jersey Institute of Technology, 154 Summit St., Newark NJ**Free parking available in parking deck***Attendance limited to first 8 registrants**

IEEE CONTROL
SYSTEMS SOCIETY
North Jersey Chapter

Topic: The IEEE North Jersey Section is pleased to offer 12 hours of training on the topic of “Model-Based DSP with FPGAs”. This is a course on the use of Simulink and Altera’s DSP Builder for the design of firmware and algorithms for Field Programmable Gate Arrays (FPGAs). It consists of 4 sessions -- two on-site at NJIT and 2 online (anymeeting.com). The course assumes that students have prior experience with Matlab and some with Simulink, the first session beginning with a review of Simulink. This is followed by instruction and examples of signal processing and system simulation. Registrants who elect to purchase the Terasic DE0-Nano, the FPGA development platform (pictured) on which labs will be performed, will receive these platforms at the first session. All registrants will receive Altera’s Quartus II FPGA development software and DSP Builder. These are fully functional licenses that will be active for 2 months, provided free of charge courtesy of Altera.



Two on-line sessions will cover the design flow for VHDL generation using Simulink and DSP Builder, the first covering the DSP Builder Standard Blockset and the second the Advanced Blockset. Hardware-in-the-Loop (HIL) simulation testing will be covered in the latter. Finally, at the 2nd on-site session students will work laboratory experiments on their FPGA development platform. Labs are to include (1) the design and implementation of a FIR filter, (2) build of a Digital Down-Converter (DDC), and (3) build of a QPSK baseband transceiver. Students may share a platform if desired when working the labs. Homework assignments will be provided, and solutions including m-code and Simulink models will be distributed, as well as a printed hardcopy of the presentation slides.

Schedule: 12 hours of instruction / lab – Saturday classes will be held at New Jersey Institute of Technology, Newark Campus, Faculty Memorial Hall, Room #110. A pizza lunch will be provided during the laboratory class on Saturday January 19th and is included in the registration fee. Attendees will be credited with 1.2 Continuing Education Units (CEU) from IEEE.

Session	Topic	Dates	Times	Venue
1	Class Introduction & Logistics	Sat 1/5/13	10AM - 2 PM	NJIT
	Review of Simulink			
	Intro to Altera Quartus & DSP Builder			
2	Altera DSP Builder	Wed 1/9/13	7PM - 8:30PM	on line
3	DSP Builder Advanced Blockset	Wed 1/16/13	7PM - 8:30PM	on line
4	Altera DSP Builder Lab Instr	Sat 1/19/13	10AM - 3PM	NJIT

Students are required to provide 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. Trial licenses may be available from the Mathworks.

Instructor: David Haessig is the manager of Waveform Products at BAE Systems, Wayne NJ. His group is engaged in development of wireless communication, control, and avionics systems for military applications. He recently served as the technical lead in BAE’s development of the Wideband Networking Waveform (WNW). Dr. Haessig holds degrees in Mechanical Engineering from Lehigh University and in Electrical Engineering from New Jersey Institute of Technology. He is a senior member of IEEE and an Adjunct Professor at NJIT where he has taught courses in controls and mechatronics. He holds 4 patents in the area of inertial stabilization and has 24 technical and professional publications.

Cost: IEEE Members \$225; Non-IEEE members \$275; Unemployed IEEE Members \$112.50; Terasic DE0-Nano \$75.

Contact: David Haessig, (david.haessig@ieee.org)

Registration Deadline: December 19th, 2012, E-Register: [To register online: click here](#). Registration limited to first 8 students.

Please mail the completed registration with a check (**payable to “North Jersey Section IEEE”**) to: Dr. Kalyan Mondal, Fairleigh Dickinson University, School of Computer Sciences and Engineering, 1000 River Road, T-MU1-01, Teaneck, NJ, 07666

Name: _____ Email address _____

___ Non-member ___ IEEE Member Member #: _____ Member of _____ technical society

Employer / Address: _____

Home Address: _____

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

A Glance at the IEEE North Jersey Section – Nov. 2012

On Nov 14, Naresh Chand, Chairman of the IEEE North Jersey Section, presided over his last executive committee meeting, at Alcatel-Lucent. The meeting started with Naresh Chand showing a recorded interview video and Diwali holiday greeting by NASA Indian Astronaut Sunita Williams from the International Space Station. In addition to the regular agenda items, there were two presentations by Naresh Chand on organizational leadership, and by Cecelia Jankowski on membership. Naresh's presentation on organizational leadership included a discussion of 52 tips on "Lessons in Life and Leadership" by Jim Kennedy, a former Director of NASA's John F. Kennedy Space Center.

The presentation by Cecelia Jankowski, Managing Director, IEEE Member and Geographic Activities, included information on the membership breakdown across the world. She indicated that while the IEEE was doing a fairly good job in gaining new members, there was room for improvement with regard to retention. There was a lively discussion and several ideas were exchanged to help improve membership development and to add more value to IEEE membership.



Naresh Chand was presented with the traditional commemorative plaque by Amit Patel, the Junior Past Chair (2009-2010). During his 2011-2012 chairmanship, Naresh Chand introduced several initiatives, including the transition to an all-electronic Newsletter with meeting notices extracted from vTools, an expansion of the use of vTools for meeting announcements, registration, and reporting, and a rotational change of venue of the Executive Committee meetings. Both 2011 and 2012 were very successful years with more than 100 events organized per year. Amit Patel thanked Naresh Chand on behalf of the North Jersey Section for his positive and dedicated leadership of the Section over the past two years.



Members of the IEEE North Jersey Section Executive Committee, from left to right: Sean Kennedy, Fred Chichester, Yu-Dong Yao, Russell Pepe, Tony Almeida, Mengchu Zhou, Amit Patel, Zhiwei Mao, Har Dayal, Kalyan Mondal, Goran Djuknic, Kirit Dixit, Adriaan van Wijngaarden, Cecelia Jankowski, Peter Pupalakis, Naresh Chand, Ajay Poddar, Mani Iyer and Durga Misra.

2012 IEEE North Jersey Section Volunteers

Executive Committee

Chair - Naresh Chand
chandnaresh@gmail.com
Vice Chairman 1 - Russel Pepe
rcpepe@ieee.org
Vice Chairman 2 - Har Dayal
dayalhar@gmail.com
Secretary - Adriaan van Wijngaarden
avw@ieee.org
Treasurer - Kalyan Mondal
mondal@fdu.edu
Members at Large
 1. Chris Peckham
cdp@ieee.org
 2. Mengchu Zhou
zhou@njit.edu
 3. Goran Djuknic
gd@ieee.org
Junior Past Chair - Amit Patel
a.j.patel@ieee.org
Senior Past Chair - Kirit Dixit
kdixit@ieee.org

Society Chapters

Aerospace Electronic Systems Society
Chair - Naresh Chand
chandnaresh@gmail.com
Antennas and Propagation Society/ 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 - Nirwan Ansari
nirwan.ansari@njit.edu
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

Instrumentation Measurement Society

Chair - Russel Pepe
rcpepe@ieee.org
Vice-Chair – Peter J. Pupalaikis
peterp@lecroy.com
Photonics Society
Chair – Naresh Chand
chandnaresh@gmail.com
Power & Energy Society
Chair - Ron Quade
rwquade@ieee.org
Signal Processing Society
Chair - Prof. 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 - Yu-Dong Yao
yyao@stevens.edu

Technical Councils

Technology Management Council
Chair - Tony Almeida
almeida@synergymwave.com

Affinity Groups

Consultants Network
Chair - Peter Schutetz
schutze@compuserve.com
GOLD
Chair - Sean Kennedy
sean.kennedy@alcatel-lucent.com
Women in Engineering
Chair - Zhiwei Mao
zmao@fdu.edu
LIFE Members
Chair - Art Greenberg
a.h.greenberg@ieee.org

Committees

Awards/Recognition
Chair - Ken Oexle
k.oexle@ieee.org
Audit Committee
Chair - Fred Chichester
fdchichester@gmail.com
Education
Co-Chair 1 - Donald Hsu
yanyou@hotmail.com
Co-Chair 2 - Kalyan Mondal
mondal@fdu.edu

Co-Chair 3 - Mengchu Zhou
zhou@njit.edu

Group coordinator / History Chair - Howard Leach
h.leach@ieee.org

Membership Development Chair - Mani Iyer
miyer108@gmail.com

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 - Kirit Dixit
kdixit@ieee.org

PACE

Chair - Richard Tax
rtax@verizon.net

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

Pre-College Activities

Chair - Har Dayal
dayalhar@gmail.com
Vice-Chair – Hitaish Sharma
hitaish@gmail.com

Student Activities

Chair - John C Taylor
john.taylor1204@gmail.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