

THE IEEE NORTH JERSEY SECTION NEWSLETTER

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chance to mingle and have fun with your colleagues. Everyone is welcome and everyone is invited. Make 2014 the year that you attend the IEEE North Jersey Section Awards Banquet. You can find further details in the April Newsletter.

You might recall that we held a Membership Drive last year at a Somerset Patriots baseball game. The event was such a success that we plan to do it again this year. Actually, everyone who attended last year had such a great time, we thought that we would just do it again. We hope to have more details in a future Newsletter. I just wanted to give you a heads up.

Also, we have a few key positions open. Over the past several months, we have added many new Volunteers to the North Jersey Section. Many of our Chairs want to move on to do other things in the Section, so their positions will be open soon. Our Chairs are also looking for Vice Chairs. We also always need help on Committees, such as Women in Engineering, Student Activities and Pre-University. Send me an e-mail, and I can give you an overview. Our next EXCOM meeting is at Alcatel-Lucent in Murray Hill, on Wednesday, April 2 at 7:00 pm (6:00 pm for the free buffet dinner). Feel free to join us (and please register for the meeting using vTools).

As always, keep in touch. Let me know if you have any questions or comments. My e-mail is always open.

Sincerely,

Russell C. Pepe,

Chair, IEEE North Jersey Section,

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

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

A Note from the Chair

Do I dare say that spring is here? Let me welcome you all to an exciting Spring 2014. Stretch and yawn, and break out of your hibernation. The North Jersey Section has been busy over the winter planning for many events. Make sure you read the Newsletter every month to keep up with all the happenings planned. Remember, this is the 60th Anniversary Celebration of the IEEE North Jersey Section. In addition to our normal activities each month, we have several special events planned this year. Again, keep an eye out, so you do not miss anything.

Every year, the North Jersey Section hosts the Annual Awards Banquet. This year, the Spectacular will be held at the Birchwood Manor in Whippany, NJ, on Sunday, May 4, from 3:00 to 6:00 pm. The event honors this year's inductees as IEEE Fellows, Region 1 Award recipients, and North Jersey Section Award recipients. Since we are celebrating the 60th Anniversary of the North Jersey Section, we plan to also honor the Past Chairs of the Section. We want to make the 2014 Awards Banquet especially eventful this year, so I am asking everyone in our Section to join in on the celebration. Not only is it a chance to honor your fellow IEEE Members, it is a great

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

Wed	Apr 2	Bell Labs, Murray Hill
Sun	May 4	Birchwood Manor
Wed	Jun 4	Clifton Library
Wed	Aug 6	Bell Labs, Murray Hill
Wed	Sep 3	Clifton Library
Wed	Oct 1	NJIT, Newark
Wed	Nov 5	Clifton Library

Awards

2014 IEEE Fellow – IEEE North Jersey Section

The IEEE grade of Fellow is conferred by the IEEE Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest. The total number selected in any one year cannot exceed one-tenth of one-percent of the total voting membership. IEEE Fellow is the highest grade of membership and is recognized by the technical community as a prestigious honor and an important career achievement. 293 individuals have been elevated to IEEE Fellow for 2014. The IEEE North Jersey Section is pleased that one of its members was elevated to Fellow grade. Dr. Emina Soljanin will be honored at our Awards Banquet on May 4, 2014. Please check the meeting calendar for further details and for information on registering for the banquet.



Emina Soljanin

for contributions to coding theory and coding schemes for transmission and storage systems

Emina Soljanin received the MS and PhD degrees from Texas A&M University, College Station, in 1989 and 1994, respectively, and the European Diploma degree from University of Sarajevo, Bosnia, in 1986, all in Electrical Engineering. From 1986 to 1988, she worked in the Energoinvest Company, Bosnia, developing optimization algorithms and software for power systems control. After graduating from Texas A&M in 1994, she joined Bell Laboratories, Murray Hill, NJ, where she is now a Distinguished Member of Technical Staff in the Mathematics of Networks research department. Dr. Soljanin's research interests are in the broad area of information and coding theory, and their applications. In the course of almost two decades with Bell Labs, she has participated in a very wide range of research and business projects. These projects include designing the first distance enhancing codes to be implemented in commercial magnetic storage devices, first forward error correction for Bell Labs optical transmission devices, color space quantization and color image processing, quantum computation, link error prediction methods for the third generation wireless network standards, and several aspects of secure communications. Her most recent activities are in the area of network and rateless coding for packet level transmission and distributed storage. For research in these areas, she has won NSF, DARPA, NAE, and ONR funding, for salary, students, travel, and workshops. Dr. Soljanin is a co-author of more than hundred research papers, co-inventor of more than a dozen patents, and she has co-authored two-monographs on network coding. Teaching and mentoring have been an important part of Dr. Soljanin's activities. In addition to regular university classes, she has taught a number of short courses such as pre-conference tutorials, special university modules, summer schools, and internal courses at Bell Labs, where she has been mentoring postdocs, Ph.D. students, and

summer interns. She is a co-author of a two-part monograph on network coding, which has been widely used for classroom teaching and independent studies. She served as the IEEE IT Society Padovani Lecturer at the 2013 North American School of Information Theory. Dr. Soljanin served as a Technical Proof-Reader, 1990-1992, and as the Associate Editor for Coding Techniques, 1997-2000, for the IEEE Transactions on Information Theory, and has organized and served as a co-chair for the DIMACS Special Focus on Computational Information Theory and Coding 2001-2005 and DIMACS Special Focus on Cybersecurity 2011-2015. Dr. Soljanin spent 2008 as a visiting researcher at Ecole Polytechnique Federale de Lausanne (EPFL), in Switzerland. She is a member of the editorial board of the Springer Journal on Applicable Algebra in Engineering, Communication and Computing (AAECP), and a member of the Board of Governors of the IEEE Information Theory Society.

2013 IEEE Region 1 Awards

IEEE Region 1 has established annual awards to recognize its members for technological innovations, for managerial excellence in an engineering organization, for outstanding contributions to education, and for outstanding support for the mission of the IEEE, member and geographic activities, Region 1 and its Sections and Chapters. Nominations are submitted by the Section. The IEEE Region 1 Awards and Recognition Committee reviews the nominations and provides a formal recommendation to the IEEE Region 1 Executive Committee. The number of Region 1 awards to be given in any calendar year will not exceed 0.1% of the current Region 1 membership. The Award recipients will be determined at the Annual Region 1 Meeting which is normally held in the summer or fall of each year. In 2013, IEEE Region 1 recognized 30 individuals. The formal presentation of the Awards will be made by the IEEE Region 1 Director or by his/her designee in the next calendar year. The IEEE North Jersey Section is very pleased that two of its members, Kalyan Mondal and John Taylor were recognized in 2013 for their contributions to the IEEE North Jersey Section. They will receive a plaque at our Awards Banquet on May 4, 2014. Please check the meeting calendar for further details and for information on registering for the banquet.



Kalyan Mondal

2013 IEEE Region 1 – Enhancing IEEE & Industry Relationship Award

for leadership and service to the IEEE North Jersey Section

Kalyan Mondal (M'80-SM'91), Associate Professor of Electrical Engineering, Coordinator of Information Technology program, and Director of the Center for Cybersecurity & Information Assurance at Fairleigh Dickinson University, earned his Ph.D. in Electrical Engineering from the University of California at Santa

Barbara (UCSB) and his M.Tech. in Computer and System Sciences from the University of Kolkata, India. He has 24 years of industrial experience with Bell Laboratories, AT&T, Lucent Technologies, and Agere Systems and 10 years of academic experience at UCSB, Lehigh University, and FDU. He holds nine US patents and has multiple publications. At FDU, he researches in digital signal processing; teaches undergraduate engineering, engineering technology, and information technology courses; teaches graduate digital signal processing and VLSI design related courses; develops undergraduate and graduate academic programs in engineering and computing fields; contributes to the Middle States, TAC-ABET and EAC-ABET accreditation of various academic programs; proposes and implements academic program improvements; and is an elected member of various academic committees. He helped the formation of FDU's Center for Cybersecurity and Information Assurance leading to its designation as a Center of Academic Excellence in Information Assurance Education (CAE/IAE) by the National Security Agency (NSA) and the Department of Homeland Security (DHS).

During his industrial career, he was involved with industry's first 32-bit floating-point DSP, DSP ASIC layout automation, industry's first MPEG-2 Simple Profile video decoder, Cable modem demodulator, HDTV receiver, Sonet/SDH Add-drop multiplexer, and Firewire chip developments initially as an individual contributor and later as a Technical Manager. He was the co-winner of the 1985 IEEE International Solid State Circuits Conference Outstanding Paper Award.

Dr. Mondal is a senior member of the IEEE and a life member of Eta Kappa Nu electrical engineering honor society. He has been the Treasurer and Co-Chair of the Education Committee of the IEEE North Jersey Section since 2012. He migrated Section's financial accounting onto the NetSuite system as an early adopter and is recognized as a power user of the same. He was the Local Arrangements Chair of the 2013 METSAC Career Advancement Workshop and facilitated the Region 1 iSTEP event at FDU. He was the founding chair of the Lehigh Valley IEEE Circuits and Systems (CAS) society chapter and an elected past member of the CAS administrative committee.



John Taylor

IEEE Region 1 – Enhancing IEEE & Industry Relationship Award

for leadership and support of IEEE student activities in the IEEE North Jersey Section

John Taylor is a GTI LMS Engineer at JPMorgan Chase. He received a BE in Electrical Engineering and an ME in

Network Information Systems Engineering from Stevens Institute of Technology, Hoboken, NJ. He has been a very active, enthusiastic and dependable member of the IEEE North Jersey Executive Committee since 2010. He first became involved in the IEEE North Jersey Section as a Chair of the IEEE Student Branch of Stevens Institute of Technology (Stevens), and in this position he organized many educational

and social events. Upon graduation in 2010, he agreed to become the Section's Student Activities Chair. In this position, he initiated, coordinated, facilitated and supported activities of the Section's three Student Branches at Fairleigh Dickinson University (FDU), New Jersey Institute of Technology (NJIT), and Stevens. Each semester, he organized and held very successful inter-chapter meetings with student branch representatives from FDU, NJIT, and Stevens to initiate and coordinate new activities. He successfully organized yearly local student paper competitions, excursions, and social events, jointly with GOLD and WIE. Since 2013, he also serves as the Section's Member-at-Large and was responsible for organizing a Social Event and Membership Drive in June 2013.

2013 IEEE MGA Outstanding Large Section Award

IEEE Member and Geographic Activities (MGA) recognizes one large Section and one small Section (worldwide) each year to recognize the Section's efforts in fulfilling educational and scientific goals of IEEE for the benefit of the public by maintaining, enhancing, and supporting the Student Branches, Technical Chapters, and Affinity Groups within their geographic boundaries. In 2013, the IEEE North Jersey Section received the IEEE MGA Outstanding Large Section Award.

2013 IEEE North Jersey Section Awards

The IEEE North Jersey Section has reintroduced Section Awards to recognize achievements of its volunteers. In 2013, Kirit Dixit, Anne Giedlinski, Howard Leach and Amit Patel were recognized for their leadership and service to the IEEE North Jersey Section.

Patents, Patents Everywhere

Our founding fathers realized the value of technology and invention in establishing a nation from the wilderness. In fact, many were inventors themselves [i.e. Washington, Franklin, Paine, Jefferson and later Lincoln for example]; and back in 1792 they framed the Constitution, giving the first congress the power to establish the Patent Office. They knew that for a young country to survive and flourish, it must be able to capture and use the intelligence of its people. The Patent Office is a formalized library of technological know-how, the blueprints for making things. It is where we formally store our techniques for transforming raw materials and knowledge into useful products and services.

The secret punch of capitalism lies in the fact that this storehouse of knowledge has grown at a fantastic rate (exponential), allowing our country to likewise grow in leaps and bounds. Today, there are over 8,000,000 patents that have been awarded since 1792. It took 143 years, until 1935, before the 2,000,000th patent was issued. Just 43 years later in 1976, the 4,000,000th patent was issued. Then 35 years after that, in 2011, the 8,000,000th patent was issued.

History of Total U.S. Patents Issued

Number of Patents	Year of Issue
0	1792
5,000	1847 [year Thomas Edison was born]
10,000	1853
25,000	1859
50,000	1865
100,000	1870
250,000	1881
500,000	1893
1,000,000	1911
2,000,000	1935 [Edison dies in 1931]
3,000,000	1961
4,000,000	1976
5,000,000	1991
6,000,000	1999
7,000,000	2006
8,000,000	2011

Key Facts:

1847 thru 1935: approximate span of the Edison era—patents increased from 5,000 to 2,000,000. This was a time span of 88 years.

1935 thru 2013: a span of 78 years yields an increase of patents issued from 2,000,000 to 8,000,000.

About 70% of all patents issued, occurs between 1935 and the present.

Little New Jersey is an invention powerhouse, ranking fourth by state in total patents issued: the first is California, then New York, and then Texas---all vastly larger states.

Maybe we should change the state motto from “The Garden State” to “The Invention State”!

Talk to you again soon.....

Harry

Harry T. Roman, IEEE Senior Member

Why I Became IEEE Member

I have over 10 years of diverse experience in financial software development, working at IT divisions of Bank of America, Merrill Lynch, Barclays Capital, Nomura Securities etc, with strong emphasis on optimally using/implementing various front office risk and trade execution computing technologies. After doing my Bachelor of Technology program in Mechanical Engineering from Indian Institute of Technology Kanpur I got offers from various engineering sector firms (auto/manufacturing sector) however I chose to work at research lab specializing in creating next generation bioinformatics software products to decode genes in genomes computationally. The field so called as Computational Genomics looked more promising to me in terms of using my computational & analytical skills gained during my education at IIT-Kanpur. I found it very interesting to use my mathematical skills achieved doing courses in core sciences Physics/Maths/Chemistry and Engineering (controls and vibration, Solid Mechanics, Fluid Mechanics etc) and computing skills achieved doing courses in computing, computational fluid dynamics, computer modeling of solid body mechanics etc to solve computational genomics problem of predicting genes in a given genome.

Followed by research lab experience I worked in various IT divisions of bulge bracket investment banks and got opportunity to solve even more challenging problems of risk analyzing complicated financial securities and executing complicated trades from IT perspective. The challenge is to handle extremely large volume of digital financial securities data and detect a pattern out of it. This pattern forms the basis of various trading strategies employed by trading desks. While working in various such projects I learned of high performing messaging middlewares, distributed applications, sophisticated caching technologies, highly scalable design patterns/data structures/algorithms and massively multithreaded IT systems. Surprisingly, I see striking similarity between huge data set that we see getting generated out of genome sequences, protein structures etc and voluminous data set that gets generated when analyzing price movements of various financial securities when market data associated to stocks, interest rates, exchange rates moves in terms of randomness that is detected while searching for various patterns in such data sets. This is a sort of converging point in my career where in I am realizing similarity of what I started with and what I am doing currently.

I think at this point of my time in my life I am ready to explore the side of mine that still searches for pure research. Joining world’s largest and most advanced research society, IEEE, would not only help me in such exploration but interaction with brilliant researchers would also expand my interest deeper into the field of applied Soft Computing, Software Programming and possibly Bioinformatics, and Biomedical Engineering. I look forward to start participating actively with other members and provide my support to IEEE fraternity in general.

-Apratim Rajendra

Calendar of Events

- April 2, 12:00PM to 1:00PM: IEEE Computer and History Societies - Exploring Clouds as Enablers of Science** – Dr. Manish Parashar, Rutgers University
Location: Auditorium M105, Muscarelle Center, 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...](#)
- April 2, 6:30 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Murray Hill, NJ**
Location: 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) or Adriaan van Wijngaarden (avw@ieee.org), [Read More...](#)
- April 8, 5:30 PM to 7:00 PM: AP/MTT, ED/CAS: Design of GaN Power Amplifiers** – Dr. Edward Niehenke of Niehenke Consulting
Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 [Getting to NJIT](#)
Contact: Dr. Ajay Kumar Poddar, Phone: (201) 560-3806, (akpoddar@ieee.org) Durga Misra (973-596-5739), Prof. Edip Niver (973)596-3542, (edip.niver@njit.edu) [Read More...](#)
- April 10, 6:30 PM to 8:30 PM: IEEE CNNNJ: Financial Crisis of 2008** - Dr. Samir Padalkar, NJ
Location: Morris County Library, 30 East Hanover Avenue, Whippany, NJ [Getting to Morris County Library](#)
Contact: Robert Walker, 973-728-0344, r.d.walker@ieee.org [Read More...](#)
- April 15, 11:30 AM to 1:00 PM: COMSOC: Advanced video Compression: Standards and Applications** - Ofer Hadar, Ben-Gurion University of the Negev, Israel
Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 [Getting to NJIT](#)
Contact: Nirwan Ansari (973)596-3670 and Amit Patel (a.j.patel@ieee.org). Check <http://web.njit.edu/~ieeenj/comm.html> [Read More...](#)
- April 15, 5:45 PM to 7:15 PM: AP/MTT, ED/CAS: Evolution of Passive and Active Microwave Filters** - Dr. Richard Snyder, RS Microwave, NJ
Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 [Getting to NJIT](#)
Contact: Dr. Ajay Kumar Poddar, Phone: (201) 560-3806, (akpoddar@ieee.org) Durga Misra (973-596-5739), Prof. Edip Niver (973)596-3542, (edip.niver@njit.edu) [Read More...](#)
- April 30, 8:15 AM to 3:45 PM: IEEE Computer and History Societies: Cybersecurity Education: A Pipeline Approach**
Location: Lenfell Hall, Fairleigh Dickinson University, College at Florham, Madison, NJ 07940
Contact: Hong Zhao (201)-692-2350, zhao@fdu.edu; Howard Leach h.leach@ieee.org [Read More...](#)
- May 04, 3:00 PM to 6:00 PM: IEEE North Jersey Section Awards Banquet**
Location: Birchwood Manor, 111 North Jefferson Road, Whippany, NJ 07981 [Getting to Birchwood Manor](#)
Contact: Adriaan J. van Wijngaarden (avw@ieee.org) [Read More...](#)
- May 06, 6:00 PM to 9:00 PM: IEEE BT, IT, COMSOC, VTS: Audio Considerations for Mobile DTV** – Tim Carroll - The Tellos Alliance/Linear Acoustics
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Joe Stack, BT Chair (609) 647-9677, 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](#)**
- **Visit: [vTools Registration](#) to register for a meeting or event**

Meeting Announcements

02 April, 2014

IEEE Computer and History Societies

Present:

Exploring Clouds as Enablers of Science

Speaker: Dr. Manish Parashar, Prof. of Computer and Electrical Engineering, Rutgers University, NJ

Abstract: Cloud computing has emerged as a dominant paradigm that has been widely adopted by enterprises. Clouds provide on-demand access to computing utilities, an abstraction of unlimited computing resources, and support for on-demand scale up, scale down and scale out. Clouds are also rapidly joining high-performance computing system, clusters and Grids as viable platforms for scientific exploration and discovery. As a result, understanding application formulations and usage modes that are meaningful in such a hybrid infrastructure, and how application workflows can effectively utilize it, is critical. In this talk, I will explore the role of clouds in science and engineering. I will also explore how science and engineering applications can benefit from clouds and how the cloud abstraction can lead to new paradigms and practices. This talk is based on research that is part of the CometCloud autonomic cloud-computing project at the NSF Cloud and Autonomic Computing Center at Rutgers.

Biography: Dr. Manish Parashar is Professor of Electrical and Computer Engineering at Rutgers University. He is the founding Director of the Rutgers Discovery Informatics Institute (RDI2) and of the NSF Cloud and Autonomic Computing Center (CAC), and is Associate Director of the Rutgers Center for Information Assurance (RUCIA). Manish received a BE degree from Bombay University, India, and MS and Ph. D. degrees from Syracuse University. His research interests are in the broad areas of Parallel and Distributed Computing and Computational and Data-Enabled Science and Engineering. A key focus of his research is on addressing the complexity of large-scale systems and applications through programming abstractions and systems. Manish serves on the editorial boards and organizing committees of a large number of journals and international conferences and workshops, and has deployed several software systems that are widely used. He has also received numerous awards and is Fellow of AAAS, Fellow of IEEE/IEEE Computer Society and Senior Member of ACM.

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

Time: 12:00PM to 1:00PM

You don't have to be an IEEE member to attend.

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

Howard Leach h.leach@ieee.org

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

02 April, 2014

IEEE North Jersey Section EXCOM meeting – Murray Hill, NJ

Agenda: 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.

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

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

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

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

08 April, 2014

IEEE AP/MTT, ED/CAS present:

Design of GaN Power Amplifiers

Speaker: Dr. Edward Niehenke of Niehenke Consulting

Abstract: This lecture introduces attendees to the GaN-transistor, its properties, various structures, including the latest GaN power amplifier (PA) design techniques. The properties of GaN will be presented showing the advantage of these devices over GaAs and Si. GaN HEMT transistors will be shown delineating the various geometries, semiconductor processes and structures with associated performance. Guidelines for reliable operation will be presented considering device junction temperature including thermal management techniques. The nonlinear models of GaN HEMT devices necessary for the CAD of PAs will be presented. Design considerations for both constant amplitude envelope signals as well as the non-constant amplitude envelope signals will be presented. Step-by-step design procedures will be shown for various GaN PA examples including different classes of operation as well as the popular Doherty PA.

Biography: Edward C. Niehenke was born in Abington, PA, in 1937. He received his BS (1961), MS (1965), and PhD

(1997) degrees in electrical engineering from Drexel University, Philadelphia, PA.

From 1961 to 1963 he was with Martin Marietta where he developed microwave transitions for superconducting delay lines and investigated behavior of semiconductor devices at 770K. From 1963 to 1997 he was with Westinghouse/Northrop Grumman in Baltimore, MD, where he was responsible for the development of state of the art RF/microwave/millimeter wave circuits, miniature integrated assemblies, and subsystems. He retired from Northrop Grumman in 1997 as a senior advisory engineer and is now a consultant and lectures on nonlinear circuits and transceiver design.

Dr. Niehenke has pioneered the development of innovative RF/microwave/millimeter wave circuits including: super low-noise amplifiers, PIN and Schottky barrier limiters, efficient linear power amplifiers, voltage tunable high Q VCO resonators, electrostatic switch and phase shifters, high power bipolar amplifier with internal matching and subharmonic suppression, silicon carbide wideband frequency multipliers, active PHEMT multipliers, receiver protectors with multi-level STC attenuator, low-noise microstrip voltage controlled and dielectric resonator stabilized oscillators, subharmonic image rejection and image enhanced mixers, planar millimeter wave two axis monopulse transceiver with switchable polarization, and low-phase noise millimeter wave fiber optical links. He recently led the development of state-of-the-art 94 GHz solid-state transmitter and transceiver miniature modules reducing the cost of millimeter wave systems and making them practical. Niehenke's innovations can be found in over 15 operational production systems.

Dr. Niehenke holds nine patents, three Westinghouse Trade Secret Awards, one Westinghouse Value Engineering Merit Award, and one George Westinghouse Innovation Award. He has given over 120 presentations at symposia, workshops, IEEE chapter/section meetings, and keynote addresses at conferences. He has authored over 30 papers on RF/microwave/millimeter wave circuits. He was on the faculty of the Johns Hopkins University, teaching electricity and magnetism for three years. As the IEEE Microwave Theory and Techniques Society 1986/87 Distinguished Microwave Lecturer, he gave his lecture "Gallium Arsenide—Key to Modern Microwave Technology" to 70 groups throughout the world. Since 1983 he has been actively teaching linear, nonlinear, and transceiver circuit design for wireless communications to over 3000 professionals throughout the world.

Dr. Niehenke is a member of the Microwave and Millimeter Wave Integrated Circuits, Microwave Systems, and Wireless Communications MTT-S Technical Committees. He was the advisor (2010), technical program chairman (1998) and chairman (1986) of the International Microwave Symposia held in Baltimore. He serves as a member of the MTT-S Technical Program Committee since 1983 and is the MTT-S Ombudsman. Niehenke was a member of MTT-S ADCOM for 9 years, was a recipient of the IEEE Centennial and

Millennium Medals, is a fellow of the IEEE, and is a registered professional engineer in the State of Maryland.

Email: e.niehenke@ieee.org

Phone: +1 410 796 5866

Address: Baltimore, Maryland, United States

Location: ECEC 202, 141 Warren St, Newark, NJ 07102

Getting to NJIT

Time: 5:30PM to 7:00PM

(5:30 PM Refreshments/Dinner,

6:00PM - 7:00 PM Seminar)

You don't have to be an IEEE member to attend.

Contact: Dr.-Ing. Ajay Kumar Poddar, (201)560-3806

(akpoddar@ieee.org)

Durga Misra (973-596-5739), Prof. Edip Niver (973)596-

3542, (edip.niver@njit.edu)

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

10 April, 2014

IEEE CNNNJ presents:

Financial Crisis 2008

Speaker: Samir Padalkar, NJ

Abstract: The upcoming meeting of the IEEE Consultants' Network of Northern New Jersey scheduled for Thursday, April 10, 6:30 PM, features a presentation by Samir Padalkar.

This talk was originally planned for February, cancelled at the time due to inclement weather.

Please note: CNNNJ meetings in 2014 will generally be held on the second Thursday of the month. Please visit the Network web site or the IEEE Events Calendar for details of our schedule.

About the Topic:

2008 Financial Crisis, Overview & Current State (From the perspective of an electrical engineer on Wall Street)

Do you know what factors really caused the worst recession since the Great Depression?

What are the prospects for the US economy in the near future?

The speaker, Samir Padalkar, will take a quick look at some often-debated basics of the 2008 financial crisis including causes, financial products and the role of various players: banks, insurers, rating agencies, Fannie - Freddie and the Federal Reserve. He will compare the 2008 crisis with the Internet Bubble. Finally, he will describe the current state of affairs including Dodd-Frank, the Volcker Rule & Too Big to Fail.

Topics covered

- Deconstructing 'Toxic' assets- CDOs and derivatives and how they work, how they were priced, Monte-Carlo simulations, role of rating agencies and AIG, who bought them.
- Fannie and Freddie- subprime mortgages- and the mortgage crisis, credit crisis and credit crunch
- Financial Fault propagations.

- The role of the Federal Reserve
- Looking at the Internet Bubble in 2000- how this was different.
- Dodd-Frank, the Volcker Rule, Too big to Fail.

Biography: Samir Padalkar has over 20 years of experience building Real-Time decision systems, first in the chemical/aerospace industry and later in Real-Time trading systems such as those used in algorithmic trading. Recently, he has held senior positions at World Trade Financial Group & Hold Brothers, both proprietary trading firm in NYC, where he built real-time equities and derivatives trading platforms.

Samir started his career with a B.Tech from IIT Madras and a PhD from Vanderbilt University. His research was patented and commercialized by the Osaka Gas Company of Japan. Later he joined Quant Trading as lead software developer and applied his Real-Time systems work to developing Fixed Income & Derivatives trading systems. In 1996 he lead the launch of "Sector", one of the first off- the- shelf trading products on Wall Street, selling it to companies like Daiwa, GovPX, TD, ABN Amro, Lehman & Chase.

In 2002, Thomson Financial bought Quant and Samir went to lead their fixed income development team as Vice president of Fixed Income Development. The following year he moved to TradeWeb, to lead a development team launching online Mortgage Backed Securities trading.

Samir lives in Summit, NJ with his wife and 2 kids, is an avid bicyclist, hiker & cricket lover and enjoys travelling to wine regions. He can be reached at samirpad@gmail.com, (908) 420-9022.

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.

Location: Morris County Library, 30 East Hanover Avenue, Whippany, NJ [Getting to Morris County Library](#)

Time: 6:30PM to 8:30PM

You don't have to be an IEEE member to attend.

Contact: Robert Walker, 973-728-0344, (r.d.walker@ieee.org) or visit, www.TechnologyOnTap.org.

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

15 April, 2014

COMSOC presents: Advanced video Compression: Standards and Applications

Speaker: Ofer Hadar, Ben-Gurion University of the Negev, Israel

Abstract: Nowadays, we cannot imagine our life without video content and without devices that enable us to acquire and display such content. According to recent 2012 research, the video content transfer over the Internet was around 60% of the overall Internet data transfer, and the overall video transfer (including the Internet) could reach 90% during the next four years. TV sets supporting only full high-definition (HD)

resolution (i.e., 1080p) are already considered to be outdated due to a dramatic demand for the ultra-HD resolution that often refers to 3840×2160 (4K) or 7680×4320 (8K) resolutions. In this talk, we will provide an overview of recent achievements in video compression technology including some results of our research group. The talk will start with motivation for video compression and a short introduction of the video compression standards history followed by the description of the current H.264/MPEG-4 AVC video coding standard. Then, we will describe the scalable video coding (SVC) standard in H.264. The last part of the talk will present the most recent high-efficiency video coding (HEVC) standard, which is capable of providing a bit-rate reduction of about 50% at the same visual quality compared to its predecessor. We will compare between HEVC, H.264 and VP9 (Google standard for video compression) that have been presented recently in PCS2013. The talk will conclude with some future directions in video compression.

Biography: Ofer Hadar received the BSc, the MSc (cum laude) and the PhD degrees from the Ben-Gurion University of the Negev, Israel, in 1990, 1992, and 1997, respectively, all in electrical and computer engineering. From August 1996 to February 1997, he was with CREOL at Central Florida University, Orlando, FL, as a visiting research scientist. From October 1997 to March 1999, he was a post-doctoral fellow in the Department of Computer Science at the Technion-Israel Institute of Technology, Haifa. In 1999, Prof. Hadar joined the Communication Systems Engineering Department at Ben-Gurion University of the Negev. Currently, he is Associate Professor and the head of the department. His research interests include image compression, advanced video coding, H.264, SVC, HECV, packet video, transmission of video over IP networks, and image processing, data hiding and cyber in compressed video streaming. Since 2011, Prof. Hadar is an Associate Editor of the Optical Engineering journal. Recently he was the guest editor (with his former Ph.D student Dr. Dan Grois) of a special section on video compression technology in Opt. Eng. 52(7), (July, 2013). Prof. Hadar also works as a consultant for various Hi-Tech companies in Israel, and is a Senior member of IEEE and SPIE.

Email: ofer.hadar2@gmail.com

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

Time: 11:30 AM to 1:00 PM

You don't have to be an IEEE member to attend.

Contact: Nirwan Ansari (973)596-3670 or Amit Patel (a.j.patel@ieee.org)

Check <http://web.njit.edu/~ieeenj/comm.html>

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

15 April, 2014

IEEE AP/MTT, ED/CAS present:

Evolution of Passive and Active Microwave Filters

Speaker: Dr. Richard Snyder of RS Microwave, NJ

Abstract: “All the World is a Filter” is true today, but was it always so? The study of passive networks stemmed from the need to understand the performance issues associated with the early power grid at the beginning of the 20th century. Development of radio communication necessitated careful attention to parasitic elements and the limitations of simple representations of inductors, capacitors, etc. The evolution of distributed elements as extensions of lumped descriptions led to significant developments in the area of synthesis, meaning that performance could be tailored to meet needs. Approximation of passive elements by active equivalents is still a work in progress. The danger is ignorance of basic principles and dependence on simulation rather than analytic thinking. This paper will explore history, discuss the present, and try to look into the crystal ball to see what might be just around the corner

Biography: Richard V. Snyder is President of RS Microwave (Butler, NJ, USA), author of 94 papers and three book chapters, and he holds 19 patents. His interests include E-M simulation, network synthesis, dielectric and suspended resonators, high power notch and bandpass filters and active filters. He received his BS, MS and PhD degrees from Loyola-Marymount, USC and Polytechnic Institute of New York (Brooklyn Poly). Dr. Snyder served the IEEE North Jersey Section as Chairman and 14-year Chair of the MTT-AP Chapter. He chaired the IEEE North Jersey EDS and CAS Chapters for 10 years. He twice received the Region 1 Award. In January 1997 he was named a Fellow of the IEEE and is now a Life Fellow. In January 2000, he received the IEEE Millennium Medal. Dr. Snyder served as General Chairman for IMS2003, in Philadelphia. He was elected to ADCOM in 2004. Within the ADCOM, he served as Chair of the TCC and Liaison to the EuMA. He served as an MTT-S Distinguished Lecturer, from 2007-2010, as well as continuing as a member of the Speakers Bureau. He was an Associate Editor for the IEEE Transactions on Microwave Theory and Techniques, responsible for most of the filter papers submitted. He is a member of the American Physical Society, the AAAS and the New York Academy of Science.

He was the MTT-S President for 2011.

Also a reviewer for IEEE-MTT publications and the MWJ, Dr. Snyder teaches and advises at the New Jersey Institute of Technology. He is a Visiting Professor at the University of Leeds, in the U.K. He served 7 years as Chair of MTT-8 and continues in MTT-8/TPC work. He is the organizer of the annual IWS conference in China. He previously was Chief Engineer for Premier Microwave.

Email: r.snyder@ieee.org

Address: President, RS Microwave, Butler, NJ

Location: ECEC 202, 141 Warren St, Newark, NJ 07102
[Getting to NJIT](#)

Time: 5:45 PM to 7:15 PM
(5:45PM Refreshments/Dinner,
6:15PM - 7:15PM Seminar)

You don't have to be an IEEE member to attend.

Contact: Dr.-Ing. Ajay Kumar Poddar, (201)560-3806
(akpoddar@ieee.org), Durga Misra (973-596-5739),
Prof. Edip Niver (973)596-3542, (edip.niver@njit.edu)

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

30 April, 2014

IEEE Computer and History Societies Present:

Cybersecurity Education: A Pipeline Approach

Speaker: Dr. Manish Parashar, Prof. of Computer and Electrical Engineering, Rutgers University, NJ

Abstract: Fairleigh Dickinson University and IEEE North Jersey Computer Chapter are pleased to announce the Second Annual Symposium on Cybersecurity Education: A Pipeline Approach to be held on Wednesday, April 30, 2014 in Lenfell Hall at FDU's College at Florham.

This year's theme is Education and how academic institutions can partner to cultivate a strategic education pipeline. The forum will feature distinguished speakers offering a life-cycle spectrum of Cybersecurity & IA from primary through post-secondary education and beyond. Attendees will gain an awareness of the educators' inherent responsibilities in preparing the next generation of top cybersecurity professionals for government, industry and academic sectors.

Agenda: The Keynote Speaker, Casey W. O'Brien, Director and Principal Investigator of the National Science Foundation-sponsored National CyberWatch Center will speak on “Cybersecurity Education Solutions for the Nation.”

The other featured presentations are:

- “Cybersecurity Learning Secondary Education” by Mandy Galante
- “New Jersey Cyber Aces Academy at Brookdale: A Collaborative Public/Private Model to Secure the Nation” by Michael Qaissaunee
- “iSECURE: Integrating Learning Resources for Information Security, Research and Education” by Reza Curtmola
- “Virtualization of the Laboratory” by Thomas Reddington
- “Strategic Crisis Management” by Carl A Singer.
- “Industry Security, Innovations and Controls” by Brett St. Pierre.

Location: Lenfell Hall, Fairleigh Dickinson University, College at Florham, Madison, NJ 07940

Time: 8:15AM to 3:45PM

You don't have to be an IEEE member to attend.

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

Howard Leach h.leach@ieee.org

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

04 May, 2014

IEEE North Jersey Section Awards Banquet

The annual IEEE North Jersey Section Awards Banquet will be held on Sunday, May 4, 2014 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, NJ this year. The affair is scheduled for Sunday, May 4, 2014 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, by Monday April 27, 2014. We will send you a confirmation e-mail upon request.

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

Russell Pepe, Section Chair

Adriaan van Wijngaarden, First Vice-Chair

Ken Oexle, Awards Committee Chair

Location: Birchwood Manor, 111 North Jefferson Road
Whippany, NJ 07981 [Getting to Birchwood Manor](#)

Time: 03:00PM to 06:00PM

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

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

6 May, 2014

IEEE BT, IT, COMSOC, VTS present: Audio Considerations for Mobile DTV

Speaker: Tim Carroll of The Tellos Alliance/Linear Acoustics

Abstract: Mobile television is quickly emerging as a new medium for experiencing video programming. Devices are generally quite small and include handheld televisions, mobile phones, tablets, laptops and related devices. The dynamic range “comfort zone” used for mixing television audio for viewing on stereo or surround in-the-home televisions is far too wide for comfortable listening on typical “earbuds” or worse, the tiny speakers in the mobile device.

Dialogue intelligibility is a serious issue for these less-than-ideal transducers. Physical and electrical limitations impact

audio quality and can reduce intelligibility. Further, the environments where mobile television would typically be used have a relatively high background noise loudness floor – if the volume is simply increased for acceptable intelligibility on soft passages, loud passages run the risk of outstripping device capabilities or worse, potentially causing uncomfortably loud audio.

The goal is to deliver to the viewer the most satisfying experience appropriate for widely varying individual listening environments. Research has shown that attempts to improve mobile audio by simply employing traditional broadcast audio processing systems actually make things worse.

This presentation includes a brief review of the audio portion of the ATSC specification for digital television, a discussion of the physical and electrical constraints inherent in typical mobile devices and an overview of the psychoacoustic aspects of listening in less-than-ideal environments. It then analyzes various approaches to handling audio for mobile TV including single-ended processing both pre- and post-transmission, metadata, and hybrid combinations of these techniques. Results of some real-world installations will also be described and recommendations for broadcasters and device manufacturers will be offered.

Biography: Tim Carroll is founder and president of Linear Acoustic Inc., the company behind the award winning AEROMAX® range of real-time and file-based audio loudness control solutions, and industry standard UPMAX® stereo/5.1 channel upmixing and downmixing technologies. The company provided its products technical services for NBC’s coverage of the 2008 Beijing Summer Games, the 2010 Vancouver Winter Games, and the 2012 London Summer Games. Linear Acoustic is a recipient of a Technology and Engineering Emmy Award for work on metadata and loudness. Tim is a member of IEEE, AES, SBE, SMPTE, and BKSTS and is a participant in the work of the ATSC and the EBU.

Location: Bell Labs, Room 6A-106, 600 Mountain Avenue, Murray Hill, NJ

Time: 06:00PM to 09:00PM

6:00PM -7:00PM Refreshments/Dinner,

7:00PM - 9:00PM Seminar

You don't have to be an IEEE member to attend.

Contact: Joe Stack, BT Chair (609) 647-9677. Adriaan J. van Wijngaarden, IT Chair, avw@ieee.org

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

North Jersey Section Hosts Fall 2014 Advanced Communications Symposium

The IEEE North Jersey Section, ComSoc, Computer, IT, and VTS Chapters will host a one-day technical symposium covering communication topics on Saturday, September 20, 2014 at the Babbio Center, Stevens Institute of Technology, in Hoboken, NJ. The program will consist of six presentations by distinguished speakers and a parallel poster session of graduate students. There will also be plenty of opportunity to interact with presenters and network with peers at any of the breaks, lunch and closing. The section's and chapter's 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 event is at a local venue within easy reach for everyone in New Jersey and the New York metropolitan area. It will also give students from nearby universities and institutes a chance to showcase their work and all participants an opportunity to learn what is happening now.

The organizing committee is currently inviting distinguished speakers who would like to give a 50-minute presentation on recent work, recent research results, and cutting edge developing technologies in wireless, networking, or communications. The six selected speakers will be notified based on specific themes chosen for the symposium. If interested, please reach out to the speaker coordinator Mani Iyer at email: mani.iyer@ieee.org.

The organizing committee is currently inviting graduate students to prepare a poster presentation on recent work, recent research results, and cutting edge developing technologies in wireless, networking, or communications. Additionally, posters are not limited to wireless topics but can cover other broader communication topics as well. Masters students working on a thesis, PhD candidates, and postdocs are encouraged to participate. There will be blocks of time reserved for poster review by all attendees. If interested, please reach out to the poster session coordinator Hong Man at email: hong.man@stevens.edu.

Registration will be opened shortly on vtools. General audience members are invited to participate and register online to save their seats. 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, mani.iyer@ieee.org

Poster Session Coordinator, Hong Man,
Hong.Man@stevens.edu

Local Arrangements Coordinator, Yu-Dong Yao, Yu-Dong.Yao@stevens.edu

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

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.

The IEEE SAC Social

The IEEE SAC Social was an opportunity for the section's student members to get away from school related activities and enjoy an early evening conversing with fellow student members and young professionals. The event took place at Wicked Wolfe, which is a venue in Hoboken that provided a great atmosphere and view of the NYC skyline. There were 23 attendees in all, and the feedback that SAC got back was one of positivity and excitement for the upcoming SAC events. Job well done!



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.

Please email the chair, Suzanne McIntosh (SKranjacMcIntosh@yahoo.com) for additional information or to join the LinkedIn group

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Welcome! New Members of the IEEE North Jersey Section

Full Name	Current IEEE Grade
John P. Wojnikiewicz	Student Member
Prudhviraj Nemarugumulla	Graduate Student Member
Benjamin J. Porter	Student Member
Joseph D. Suarez Pacheco	Student Member
Marek Stanislawczyk	Student Member
David Liu	Student Member
Jonathan Agudelo	Student Member
Oludare A. Bello	Graduate Student Member
Abbas Kiani	Graduate Student Member
Ali Mohammad Fouladgar	Student Member
Patrick S. Urbankowski	Student Member
Arnab Paul	Graduate Student Member
Cristhian Soto	Student Member
Jacob A. Porter	Student Member
Yanbo Tian	Member
Natalie Raketic	Member
Guan Wang	Graduate Student Member
Nirav G. Davra	Graduate Student Member
Daniel T. Worts	Student Member
Matthew J. O'Donnell	Student Member
Charles Bellerio	Associate Member
Abdulrahman Alsaïdi	Student Member
Nicholas W. Nicolini	Student Member
Yu Gan	Graduate Student Member
Mathew Yarossi	Graduate Student Member
Wazee Logunleko	Member
Biruk A. Gebre	Graduate Student Member
Michelle Graham	Student Member
Tony Tempio	Associate Member
Katherine M. Dawson	Student Member
Siang Jin	Graduate Student Member
Thomas J. Burke	Graduate Student Member
Umar Hassan	Student Member
Keith Kraus	Student Member
Dev Patram	Student 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](#)

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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: Sean Kennedy (sean.kennedy@alcatel-lucent.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 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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2014 IEEE North Jersey Section Volunteer

Executive Committee

Chair - Russell Pepe
rpepe@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@fd.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 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 - Amit Patel
a.j.patel@ieee.org

Computer Society
Chair - Hanna (Hong) Zhao
zhao@fd.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
emad.farag@alcatel-lucent.com

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@fd.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
Chair - Tony Almeida
almeida@synergymwave.com

Affinity Groups
Consultants Network
Chair - Peter Schutz
schutze@compuserve.com
Young Professionals
Chair - Sean Kennedy
sean.kennedy@alcatel-lucent.com

Women in Engineering
Chair - Zhiwei Mao
zmao@fd.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@fd.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