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

THE IEEE NORTH JERSEY SECTION NEWSLETTER

Vol. 61, No. 2   FEBRUARY 2014

In this Issue

A Note from the Chair

Wow, what a winter!!! I hope you are all staying warm and dry. Remember to use your legs when you shovel, not your back.

I have some big news to report from last year. Adriaan J. van Wijngaarden, North Jersey Section Vice-Chair and I started a new Society in our Section, jointly with the New York Section. The new Society is the Information Technology (IT) Society. Adriaan already had two meetings in 2013. We all look forward to very interesting talks from the IT Society in 2014. Also, Adriaan and I plan on finalizing the Electromagnetic Compatibility (EMC) Society Chapter in our Section in the coming months. The formation of the North Jersey Chapter of the EMC Society was stalled last year, but we intend to revive the formation initiative in 2014.

I mentioned in the January Newsletter that we plan to focus on Student Activities (SAC), Pre-University and Women in Engineering (WIE) this year. I am proud to announce that Moia Perez has joined our Section as a Volunteer to act as the Vice-Chair of WIE. She plans to work alongside Zhiwei Mao, WIE Chair. I look forward to exciting work ahead for WIE. SAC has already budgeted for an aggressive schedule with our

North Jersey Universities. Plans are also being made to continue and strengthen our work with local High Schools in the area to promote STEM Programs.

Plans for the North Jersey Section 60th Anniversary are in full swing. We could still use help organizing events for the Anniversary Celebrations. Contact me if you would like to volunteer for the 60th Anniversary Celebration or for any other Section positions. We have an aggressive agenda in the North Jersey Section, and we can use all the support we can get.

Note that we publish a one-page version of the Newsletter every month. It is a listing of Meetings, Seminars, Technical Talks and other Events in the Section. We would like to see this condensed version of the Newsletter posted on bulletin boards at your company, library or other public places. IEEE events are open to the public. We want to make sure the word gets out about IEEE events schedule throughout North Jersey. Please post the one-page Newsletter and publicize our great events.

Keep your e-mails and calls coming. I like hearing from you.

Sincerely,

Russell C. Pepe

Chair, IEEE North Jersey Section

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

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

Wed	Feb 5	NJIT, Newark
Wed	Mar 5	Clifton Library
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

The EXCOM meetings start at 7 pm at the respective locations. For more information, please check vTools, the Newsletter and the Event Calendar on the website. The Dec. 2014 meeting has not been scheduled yet.

Utility Wind Power Started in New Jersey

by Harry T. Roman, Senior Member, IEEE (North Jersey Section)

On October 20th, 1933, a remarkable wind turbine prototype was ready for testing. Public Service Electric and Gas Company was the host site for a large-scale test of a vertical axis wind turbine known as a Madaras wind rotor, operating on the Magnus effect. Six national electric utility companies sponsored this $140,000 demonstration program at PSE&G's Burlington Generating Station site in western Burlington County.

Baseball pitchers use the Magnus effect when they apply spin to a ball as it moves through the air, causing it to curve. Wind moving across the face of the large cylinder-shaped wind turbine causes the cylinder to rotate. Mother nature "pitches" wind at the machine instead of the baseball pitcher "pitching" a curve by spinning the ball. In one case the wind moves, in the other, the ball moves. Spin is the commonality.

Some statistics are in order.

The wind rotor was 90 feet tall, about 22 feet in diameter, and weighed 4,000 pounds–two tons. [The vertical rotor was about the same size as a grain silo.]

The conceptual plan was to have 20 rotating towers [20 MW] mounted on rail flatcars, moving along a set of circular rails. The circular track measured 3,600 feet in diameter.

Each rotor was designed to generate 1 MW of power, with each generator interfacing with the wind rotor and a third rail that would collect the output power.

The Burlington Wind Rotor (PSE&G File Photo)

The initial design called for 20 moving and rotating turbines that could begin generating electricity in winds of 6 miles per hour. [A later design envisioned 50 or more moving rotors.] The 20 tower design, with its large circular track, would occupy about 235 acres, or about 0.4 square mile of land area. Putting this into perspective, a typical golf course occupies 100-150 acres; so this wind power concept would occupy the surface area of two golf courses to generate 20 MW of power.

Exploring this conceptual system design a bit further we find that the gage of this circular railroad track (the space between the rails) is 30 feet. A standard train rail gage is considerably smaller [4 feet 8.5 inches in the US and Canada.] This wide gage is needed to support the 22-foot diameter of the wind rotor itself. Each flatcar would be 40 feet long and weigh 150 tons; with its rails firmly set in concrete. The circular track is designed to allow the wind rotors to take advantage of winds coming from any direction.

Engineers at that time calculated that by using a 90-foot tall wind rotor with a 22-foot diameter exposes about 2,000 square feet of surface area to the wind, making it capable of developing as much force as an average size locomotive traveling at 40 miles per hour.

Engineers designed the output of the turbines to interface directly to the high tension, high voltage transmission lines of a utility grid-which at Burlington Generating Station at that time would have been 138,000 Volts. When the wind was blowing, the turbines would generate as much power as they could. When wind was insufficient to make the turbines rotate, conventional steam and hydroelectric power plants could generate needed electricity.

So what became of this unusual concept?

The demonstration rotor was severely damaged in a hurricane and the program was ended. The wind speeds in the area also proved to be considerably less than the 14 mph expected. It is also not unreasonable to expect that rapid increases in conventional power plant efficiencies made a significant impact on the economics of wind power at that time.

Talk to you again soon . . . . .

Harry

Harry T. Roman
Senior Member, IEEE
North Jersey Section

Read this further if you are a non-member or have not renewed your Membership

- **By Mani Iyer**

This is a welcome note from North Jersey Section Membership Development Chair to all IEEE members and prospective non-members who attended IEEE events in 2013:

First, an earnest appeal to all IEEE Members who may not have renewed their membership for 2014:

As an IEEE Member in 2013, you have helped the IEEE North Jersey Section serve your local community, and I want to thank you for your support. We take seriously our mission and obligation to raise awareness about the role that Engineering and Technology can play in making our world a better place. In that spirit, the IEEE North Jersey Section sponsored several worthwhile activities in 2013, including a Lecture Series Program, Chapter Technical activities, Young Professional Events (GOLD), Student Activities, Women In Engineering, Consultants and Entrepreneurs' Network, and a Section Distinguished Member Awards program.

During a recent review of the membership roster, we have noticed that some of you have not yet renewed for the 2014 membership year. As busy as our daily life is, perhaps this was a simple oversight. Your renewal consideration during these tough economic times is greatly appreciated. If you have become unemployed, IEEE will help by discounting your annual membership dues 50%.

Because you make a difference, I am seeking your membership renewal and support again in 2014 - the good deeds we deliver to our community depend on it. You can renew your IEEE membership at www.ieee.org/renew. You can reach me with any membership related questions at northjerseymembership@yahoo.com

Next, I would also like to take this opportunity to appeal to non-members who have been participating in the numerous IEEE sponsored events throughout 2013 to join the IEEE organization in 2014.

Thank you for your time, and continued consideration to support the activities of the IEEE North Jersey Section. If you have already renewed your membership or joined IEEE recently, we thank you for your support.

We would like to invite you to all the talks and events published on our website calendar. We would also like to solicit for any free space you may have available for hosting either technical talks and also for hosting educational courses.

Let me know how I can be of any assistance.

Sincerely,

Mani Iyer

Chair, IEEE North Jersey Section Membership Development

Email: northjerseymembership@yahoo.com

Congratulations to North Jersey Section's 2013 IEEE Senior Members

IEEE North Jersey Section is honored to recognize the excellence of its valued members, especially when they have performed for a long time at a particularly high-quality level.

Congratulations to the following newly elevated IEEE Senior Members in North Jersey Section in 2013:

Name	Society
Tian Bu	
Mukesh Gandhi	Power & Energy
Donald Gies	Power & Energy
Chandrasekharan Raman	Communications
Christopher Stevenson	Computational Intelligence
Dimitris Dimitriadis	Signal Processing
Firdaus Janoos	
Linhao Liu	Communications
Chee Wei Wong	
Nabil Adam	
Stuart Hanebuth	Power & Energy
Joe Chimento	
Michael Garyantes	
Yi Sun	Engg. in Medicine and Biology
John Van Dyk	Communications
Ray Jablonski	Circuits and Systems
Rucha Lakhe	
Elena Neira	Communications
Robert Walker	

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.

Dynamics of Life and Moving on to the Future

Ulrich L. Rohde, IEEE Life Fellow

At any time in history, we examine things around us, intellectually as well as emotionally, and if we are smart, we go back to the origins of these behavioral patterns and evaluate their causes and execute validity checks. Those trips back into the past and then into the future can be both stressful and educational. Most people don't make mistakes in rational things but in emotional territory. As in the past there were small villages and tribes with a "chief", a medicine man and an elder. It is obvious that many decisions were based on their past experience rather than science. The actual command structure also came from a perceived power the men embodied. The motivation not to break rules was derived from a fear of punishment and just fear of the unknown.

I would like to take a journey from these past times and move forward as I will try to help with this transition and a way to reason with some of the thoughts coming up.

The Power of Communication

In the old times of villages and tribes, there was no universal defined language, and the number of linguistic expressions was limited and mostly sufficient. Trust among the tribes' members was also limited. Some humans needed to get very basic or rather modest needs fulfilled while others showed a great need for power and thus wanted to rule. Nature itself created the rule of survival of the fittest, not necessarily a bad thing but by today's standards hardly a democratic matter. The inner tribe communication created a level of ruling by effectiveness, like in a team where someone will establish himself or herself as a leader unless someone is formally appointed. If the leader is effective, the position will be maintained and maybe even grow in power and significance. This is not like an election but a logical succession; however, not without politics.

The positive part of this is that the tribe takes care of its members and even the weak ones will have a place. And there is mistrust regarding outsiders. Will they have the same value system? Do they have more knowledge (power), different gods, greater needs or power-hungry members who may hurt others?

Nature itself created this "undemocratic" system, which had a somewhat stable constellation before mankind interfered, but it does not work for the present time.

One Person = 1 Vote

The problem with equalized systems is that modern information and the amount of it including some of the details are beyond people's comprehension. As a consequence, identical things have different meanings to different people, which is an invitation for trouble.

In the past things were simpler, not SIMPLE, fewer variables. Former great empires like Greece and Rome were bound to go under as they had grown just too big and thus were no longer controllable. The gap between power and wealth and the

"working class" increased. This pattern we actually experience even today and there is no easy solution.

The rich and rich companies are already "overtaxed" and have not much of an incentive to invest. If they take great risks and turn out to be successful, they pay a premium for the result. And if they don't invest they get yelled at for being unsocial. Not a good situation.

It all goes back to the lack of information and conversation, honest conversation amongst the relevant parties and the alliance of some parties with the unions to buy more votes from the class of less income is destructive!

So as I stated, communication, or lack of open honest communications is a big negative factor. We may like the personality of our politicians but not necessarily their decisions! They cause fear, which brings us to the factor fear, how to understand it and conquer it.

The Fear Factor

There are many forms of fear. For most people and animals the fear of death is the strongest one, followed by the fear of the unknown as it may also result in death.

The first fear is hard to battle. All of us have a beginning and a (physical) end. I don't want to touch the religious factor here as this leads away from the more common fear of failure.

If I exclude the initial more dramatic kind of fear, there is the fear of failure.

Having passed many examinations in my life, from school to medical evaluations, also job interviews when I came just from the university, or on the other hand, having made decisions for companies with billions in sale, I must admit this comes with a lot of pressure.

As we grow up, many of our decisions have less impact on others, mostly on us. Later when we are responsible for many families, things tend to get more complex; there are short and long-term decisions and some in between.

And in life there are values like prestige and drive, a healthy one and a dangerous one. There is also convention. Convention, right or wrong, sets certain standards. Some are strong, can afford to be "eccentric" whereby I believe a certain eccentricity is a necessity in order to be emotionally and intellectually successful. Staying inside a shell is unproductive and provides no insight to the world. There is also courage needed to make (hopefully only small) mistakes, easily correctable.

Life needs boundaries, boundary conditions, both in the job and in private life.

Wealth and being rich have no absolute meanings. It is relative to someone else or an abundance of money and power.

We are driven by our character and personality. Look at lottery winners. They can barely handle their overnight wealth as they never learned how to deal with this. Some of us are afraid of success, shining success, presents from friends, being publicly recognized. All of this requires preparedness, a stable and non-corruptible character as well as a hand full of competent friends or a sanity check.

To refuse any of these success signs, indicates a troubled past, but to have only these signs of success in mind produces real trouble in the future. The key to deal with fear is to be prepared. Like a difficult exam or complex decisions, the best is preparation.

One of the most emotional things in life is to write the last will, which is irrevocable. Here less emotion comes into play but a fair deal for all involved and to find an experienced (tax) lawyer who helps you to come as close to a good solution as the tax laws ethics will allow you to.

The biggest enemies of fear are education and preparedness. The government frequently changes existing law for convenience purposes. Our Russian friends have called this decadent and the German Government has learned this as well, to change things retroactively.

Today's world is dynamic and has its always changing rules and instabilities, which we have to deal with. An experienced manager will foresee these things to some extent, but possibly not fully.

The needs of the industry have destabilized many things. Rather than have managers with good foresight, they get highly paid if they are ousted and are not made responsible, while basic workers get time-limited contracts, which make long-term planning on their part impossible.

Here is only one way out. Get the best education in life, work on your continuing education, do good things in your area of expertise and don't hide it.

Just the opposite, make your abilities known. Life is full of competition and more and more people will compete for the same job!

What is the Conclusion?

Today we are no more driven by stable values. Neither the churches nor the political establishment are a pillow of stability or hope. We are in charge of ourselves, with our beliefs, proactive or destructive, education, risk-taking, own profile as well as by the selection of our trusted friends and advisors.

This is not always easy but very successful. Be grateful for help, don't reject it but value it first, and above all have a good plan and execute it!

Biography of Prof. Ulrich Rohde

Prof. Ulrich L. Rohde, Dr. -Ing. habil, is a Chairman of Synergy Microwave Corp., Paterson, New Jersey; President of Communications Consulting Corp., serving as an honorary member of the Senate of the Department of Defense University Munich, a honorary member of the Senate of the Brandenburg University of Technology Cottbus–Senftenberg, Germany; past member of the Board of Directors of Ansoft Corporation, Pittsburgh, Pennsylvania; and he is a partner of Rohde & Schwarz, Munich, Germany.

Prior to being appointed Honorary Professor of RF and Microwave Technologies at the University of Cottbus, Dr. Rohde was appointed Visiting Professor of RF and Microwave Technologies in November 2001 at the University of Cottbus, Germany, was member of the staff at George Washington University (1982) and as an Adjunct Professor at the University of Florida, Gainesville, teaching in the Electrical Engineering and Computer Sciences departments gave numerous lectures worldwide regarding communications theory and digital frequency synthesizers. He is also a Full Professor at the University of Oradea.

Dr. Rohde has published more than 300 scientific papers in professional journals and author/co-authors of over dozen books and book chapters, and several dozen patents.

Dr. Rohde is an IEEE Life Fellow, a member of MTT-17, MTT-22, an Invited Panel Member for the FCC's Spectrum Policy Task Force on Issues Related to the Commission's Spectrum Policies, a member of the ETA KAPPA NU Honor Society, a member of the Executive Association of the Graduate School of Business-Columbia University, New York, a member of the Armed Forces Communications and Electronics Association, a Fellow of the Radio Club of America, and a Former Chairman of the Electrical and Computer Engineering Advisory Board at NJIT.

Dr. Rohde is selected to be part of the Microwave Legends: Through innovation and invention, these 45 people, places, and things have shaped the microwave industry, Microwave & RF Magazine 2006. Dr. Rohde is also selected in the list of 100 Divine Innovators of November 2011, Microwave Journal.

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

Calendar of Events

- **February 5, 4:45 PM to 6:15 PM** - **IEEE AP/MTT, ED/CAS** - NEMS and MEMS at Furtwangen University - Prof. Ulrich Mescheder, Hochschule Furtwangen – University
  Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT
   Contact: Dr.-Ing. Ajay Kumar Poddar, (201) 560-3806 (akpoddar@ieee.org),   Prof. Edip Niver- (973)596-3542 (edip.niver@njit.edu) Prof. Durgamadhav Misra (dmisra@njit.edu) Read More…

- **February 5, 6:30 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Newark NJ**
  Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT
   Contact: Russell Pepe (rcpepe@ieee.org), Chris Peckham (cdp@ieee.org),Adriaan van Wijngaarden (avw@ieee.org) Read More…

- **February 6, 2:00 PM to 3:00 PM: IEEE IT, COMSOC, VTS – Robust Uplink Communications with Variable Backhaul Connectivity – Prof. Shlomo Shamai (Technion)**
  Location: Bell Labs, Alcatel-Lucent, Main Building, Room 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974,
  Getting to Bell Labs
  Contact: Adriaan van Wijngaarden (avw@ieee.org**). **Read More…

- **February 12, 6:30 PM to 8:45 PM: IEEE PACE presents: ENGINEERS MEET-The Business Side of The Engineers' Career: Contract Engineering & What you can do? – Richard Tax, Contract Engineer, President of AEA Inc.**
  Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 (973-772-5500)
  Getting to Clifton Library
  Contact: Paul Ward, 973 790-1625. pward1130@aol.com, Richard F. Tax, 201- 664-6954, rtax@aea.org

- **February 13, 6:30 PM to 8:30 PM:** - **IEEE CNNNJ - Consultants' Network -** Financial Crisis of 2008 – Dr. Samir Padalkar
  Location: Morris County Library, 30 East Hanover Ave, Whippany, NJ 07981 Getting to Morris County Library
   Contact: Robert Walker, (r.d.walker@ieee.org) 973-728-0344, or visit www.TechnologyOnTap.org   Read More…

- **February 20, 5:30 PM to 7:00 PM:** - **IEEE AP/MTT, ED/CAS, TMC –** The Life of James Clerk Maxwell – Dr. James Rautio of SONNET
   Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT
   Contact: Dr.-Ing. Ajay Kumar Poddar, (201) 560-3806 (akpoddar@ieee.org), Prof. Durgamadhav Misra (dmisra@njit.edu)
   Prof. Edip Niver- (973)596-3542 (edip.niver@njit.edu) Read More…

- **February 27, 6:30 PM to 8:30 PM:** - **IEEE SAC Special**
   Location: Wicked Wolf, 120 Sinatra Dr. Hoboken, NJ 07030, Getting to Wicked Wolf, Hoboken NJ
   Contact: John C Taylor john.taylor1204@gmail.com   Read More…

- **March 5, 6:30 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Clifton NJ**
   Location: Clifton Public Library (Allwood Branch, 44 Lyall Road, Clifton, NJ 07012 Getting to Clifton Public Library
   Contact: Russell Pepe (rcpepe@ieee.org), Chris Peckham (cdp@ieee.org), Adriaan van Wijngaarden (avw@ieee.org) Read More…

IEEE NORTH JERSEY SECTION – Short Courses

- **IEEE North Jersey Section Course***: C# .NET Programming* - Seven weekly classes (March 1, 8, 22, 29, April 5, 12, 19, 2014) New Jersey Institute of Technology, Newark, New Jersey (Getting to NJIT), Read More…
- **IEEE North Jersey Section Course***: Project Management* - Seven weekly classes (March 1, 8, 22, 29, April 5, 12, 19, 2014) New Jersey Institute of Technology, Newark, New Jersey (Getting to NJIT), 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

February 5, 2014
AP/MTT, ED/CAS, ECE Dept, NJIT present: NEMS and MEMS at Furtwangen University

Speaker: Prof. Ulrich Mescheder, Hochschule Furtwangen – University

Abstract: In the presentations research projects in the field of Nano-Electro-Mechanical and Micro-Electro-Mechanical Systems (NEMS and MEMS) at Furtwangen University (Germany) are presented. Especially, results from several research projects about miniaturized sensors and actuators are discussed.

A concept for integrating self-organized nanoprocessing techniques into common Si-technology (micro-nano-integration) has been developed. Using porous Si a self-organized nanomaterial different applications such as biosensing, passive and active optical filters and bonding based on the Velcro-principle where introduced in the last few years at the Institute for Applied Research.

For MOEMS, a new approach for stress optimization is presented which allows the realization of large active focusing micromirrors based on SOI-technology.

Biography: Prof. Ulrich Mescheder was born on March 16, 1957 in Stukenbrock, Germany. He received his Dipl. Phys., Ph.D. (Dr. rer nat) in 1982 after study at University Bielefeld and Marburg (focus on solid state physics). He has been a professor at Hochschule Furtwangen – University Department Computer and Electrical Engineering and Institute for Applied Research, Furtwangen. His research activities includes Microtechnology/Micromachining, Microsystems (MEMS), Nanotechnology. He is a member of German Physical society, Verband deutscher Hochschullehrer and IEEE. He is currently the Executive Vice-president for Research Director Institute for Applied Research, Director Competence Center for Microfabrication and Systemintegration, Baden Württemberg (ZeMiS) Vice-director Graduation school GenMik (University Freiburg) he has worked on „Optoelectrical Measurements of amorphous Silicon".

From1985-1991 he was with with the Philips Research Laboratory, Hamburg, Department Material Science, Thin film technology. He was a Visiting scientist at the Institute for Microstructuring Technology (IMT) in Berlin, working on technological developments for x-ray-lithography (mask technology and characterisation techniques).

Email: mes@hs-furtwangen.de

Address: Furtwangen, Germany

Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT

Time: 4:45PM to 6:15PM

Contact: Dr.-Ing. Ajay Kumar Poddar, (201) 560-3806 (akpoddar@ieee.org)

Prof. Edip Niver- (973)596-3542 (edip.niver@njit.edu)

Prof. Durgamadhav Misra (dmisra@njit.edu)

For Updates and Registration: Click Here

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February 5, 2014
IEEE North Jersey Section EXCOM meeting - Newark, NJ

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

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

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

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change. 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: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT

Time: 6:00PM to 9:00PM

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

For Updates and Registration: Click Here

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February 6, 2014
IEEE IT, COMSOC, VTS present: Robust Uplink Communications with Variable Backhaul Connectivity

Speaker: Prof. Shlomo Shamai (Technion)

Abstract: Shlomo Shamai (Technion) will be giving a presentation on robust uplink communications with variable backhaul connectivity.

This presentation will be held at Bell Laboratories, Alcatel-Lucent, in Murray Hill, NJ.

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

This study focuses on systems in the context of robust distributed cell processing, and is motivated by recent concepts of cloud radio access networks. We consider a simple system (cellular for example) where:

- Two mobile users communicate with a central (cloud) decoder via two base stations;
- The mobile users are connected to the base stations by a Gaussian channel with quasi-static fading;
- The base stations are connected to the decoder by orthogonal finite-capacity links, whose connectivity is subject to random fluctuations;
- The mobile users are unaware of the channel state or of the backhaul connectivity state;
- The base stations are uncertain about the state of the backhaul links;
- The base stations are oblivious to the mobile users' codebooks and employ a robust compress-and-forward procedure to relay information to the central decoder.

We derive upper and lower bounds on the average achievable throughput with respect to the prior distribution of the fading coefficients and of the states of the backhaul links. Whether with or without fading, the analysis and numerical results reveal the importance of broadcast coding and layered compression in opportunistically leveraging advantageous channel and backhaul conditions.

This is joint work with R. Karasik (Technion) and O. Simeone (NJIT).

Biography: Shlomo Shamai (Shitz) received the B.Sc., M.Sc., and Ph.D. degrees in electrical engineering from the Technion—Israel Institute of Technology, in 1975, 1981 and 1986 respectively.

During 1975-1985 he was with the Communications Research Labs in the capacity of a Senior Research Engineer. Since 1986 he is with the Department of Electrical Engineering, Technion-Israel Institute of Technology, where he is now a Technion Distinguished Professor, and holds the William Fondiller Professor of Telecommunications. His research interests encompass a wide spectrum of topics in information theory and statistical communications.

Dr. Shamai (Shitz) is an IEEE Fellow and a Member of the Israeli Academy of Sciences and Humanities and a Foreign Associate of the US National Academy of Engineering. He is the recepient of the 2014 Rothschild Prize in Mathematics/Computer Sciences and Engineering and the 2011 Claude E. Shannon Award. He has been awarded the 1999 van der Pol Gold Medal of the Union Radio Scientifique Internationale (URSI), and is a co-recipient of the 2000 IEEE Donald G. Fink Prize Paper Award, the 2003, and the 2004 joint IT/COM societies paper award, the 2007 IEEE Information Theory Society Paper Award, the 2009 European Commission FP7, Network of Excellence in Wireless COMmunications (NEWCOM++) Best Paper Award, and the 2010 Thomson Reuters Award for International Excellence in

Scientific Research. He is also the recipient of 1985 Alon Grant for distinguished young scientists and the 2000 Technion Henry Taub Prize for Excellence in Research.

He has served as Associate Editor for the Shannon Theory of the IEEE Transactions on Information Theory, and has also served on the Board of Governors of the Information Theory Society. He is a member of the Executive Editorial Board of the IEEE Transactions on Information Theory.

Address: Technion, Haifa, Israel

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

Getting to Bell Labs

It is not necessary to register as a visitor to access this area.

Everyone is welcome to attend this meeting.

Time: 2:00PM to 3:00PM

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

For Updates and Registration: Click Here

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February 12, 2014

NJ Section PACE presents: ENGINEERS MEET, the Business Side of The Engineers' Career: Contract Engineering & What you can do?

Speaker: Richard F. Tax, a contract engineer for more than 35 years, and President of the American Engineering Association Inc.,

Abstract: On Wednesday, the North Jersey Section PACE Committee will meet to discuss Contracting Engineering (A.K.A. Job Shopping) and the job market. The subject will focus on "Contract Engineering an Alternate Employment Path" Electronic Design, May 1997

http://www.aea.org/pdf/Contract_Engineering_07.pdf

Contrary to conventional wisdom and Engineer Shortage Propaganda, students and members of the Engineering Community are facing extreme fluctuations in the demand for their skills and services. Unfortunately, this means that a lifetime career in engineering will be a thing of the past unless; decisive and collective action is taken by members of the Engineering Community

We will briefly look at a history of engineering manpower demand fluctuations over a 30 year period to familiarize you with the employment situation as shown by the Deutsch, Shea and Evans - High Tech Recruiting Index.

Our primary focus will be on Contract Engineering as an Alternate Employment Path with a detailed program to familiarize you with Contract Engineering. You will learn more from this presentation than many contract engineers know with years of experience

We will start with an introduction to Contract Engineering covering definitions, pay structure and the client, contract

house, engineer relationship. You will learn who and what contract engineers are, where they work, when, why, how they get assignments, and whether this is for you. We will cover sources of contract firms and other related information through to getting an assignment and the contract.

Biography: Richard F. Tax is a Senior Life member of IEEE and has served as a contract engineer for more than 35 years. He is currently -president of the American Engineering Association Inc., an organization dedicated to the enhancement of the Engineering Profession and US Engineering Capabilities. www.aea.org

He has provided design, and development support for: ABEX Research Center, Allied Signal, Bendix, Conrac Corp, Dalto Electronics, DHS Systems, Energetics Science, GE Transportation Div. Holobeam Inc. IREX Medical Sys., ITT Avionics, Lockheed Electronics, .Lockheed Martin, National Medical Care, Singer Kearfott, Technicon, , United Defense. And has designed systems for NASA, FAA, US Army, Navy and Air Force. His work also includes test FMECA and QC studies.

Richard is a graduate of Fairleigh Dickinson University with a BSEE

Mr. Tax received the North Jersey Section Award for Leadership in 1979, the Region I United States Activities Board (IEEE-USA) Award for Leadership in 1981, the IEEE Centennial Medal in 1984, the USAB Citation of Honor in 1984, the USAB Professional Achievement Award in 1988, and the Region I Award for Outstanding Contributions to Engineering Professionalism in 1989. He has been active in the Section since 1974. Richard has served the section as Member at Large, Vice Chairman, and member of the Education Committee. He was Chairman of the North Jersey Section from 1985 through 1986. In 1987 - 1988 he chaired the 20,000 member Metropolitan Sections Activities Council (METSAC).

He has been directing monthly Section PACE meetings for more than ten years. Richard continuously stresses the importance of membership participation at the Section level.

Welcome: Guests, members and students from other professional societies and engineering disciplines are always welcome. We now include members from IEEE, ASME and AEA

Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011. Directions: tel. (973) 772-5500

Time: 6:30 to 9:00 PM

Refreshments will be served.

Contact: Paul Ward, (973) 790-1625. PWard1130@aol.com,

February 13, 2014

IEEE Consultants' Network of Northern NJ presents: Financial Crisis of 2008

Speaker: Samir Padalkar

Abstract: The upcoming meeting of the IEEE Consultants' Network of Northern New Jersey (www.TechnologyOnTap.org), scheduled for Thursday, February 13, 6:30 PM, features a presentation by Samir Padalkar.

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 two kids, is an avid bicyclist, hiker and 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 pro¬motes the use of independent technical consultants by business and industry.

ALL ARE WELCOME! Free event – open to the public

Location: Morris County Library, 30 East Hanover Avenue, Whippany, NJ, Getting to Morris County Library

Time: 6:30 - 8:30 PM

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

Although there is registration required, in order to accommodate all participants, please try to advise us by Monday, February 10, if you plan to attend.

For Updates and Registration: Click Here

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February 20, 2014

AP/MTT, ED/CAS, TMC, ECE Dept, NJIT present: The Life of James Clerk Maxwell, Æthereal Waves Make History, The four scientists who saved James Clerk Maxwell's theories

Speaker: Dr. James Rautio of SONNET

Abstract: Maxwell first published what came to be called "Maxwell's equations" in 1865. However, it was not until 1888, and Heinrich Hertz's experimental validation that Maxwell's equations were widely accepted as correct. The story of the intervening 23 years is little known. Maxwell, who died in 1879, was exceptionally modest and did not promote his own results at any time. The survival of Maxwell's equations was up to the only three researchers in the entire world who paid serious attention to Maxwell's paper in 1865 and his seminal Treatise in 1873: Oliver Heaviside, Oliver Lodge, and George Francis FitzGerald. Later, Hertz joined the group forming "The Four Maxwellians". This presentation describes the torturous 23 year path Maxwell's equations took from their creation to their initial acceptance. No mathematical knowledge is needed or expected; this presentation is ideal for a general audience.

Biography: ProJames C. Rautio (S'77–M'78–SM'91–F'00) received the B.S.E.E. degree from Cornell University, Ithaca, NY, in 1978, the M.S. degree in systems engineering from the University of Pennsylvania, Philadelphia, in 1982, and the Ph.D. degree in electrical engineering from Syracuse University, Syracuse, NY, in 1986.

From 1978 to 1986, he was with General Electric, initially with the Valley Forge Space Division, then with the Syracuse Electronics Laboratory. During this time, he developed microwave design and measurement software and designed microwave circuits on alumina and on GaAs. From 1986 to 1988, he was a Visiting Professor with Syracuse University and Cornell University. In 1988, he joined Sonnet Software, Liverpool, NY, full time, a company he had founded in 1983. In 1995, Sonnet Software was listed on the Inc. 500 list of the fastest growing privately held U.S. companies, the first microwave software company ever to be so listed. Today, Sonnet Software is the leading vendor of high accuracy three-dimensional planar high-frequency electromagnetic analysis software.

Dr. Rautio was the recipient of the 2001 IEEE Microwave Theory and Techniques Society (IEEE MTT-S) Microwave Application Award. He was appointed MTT Distinguished Microwave Lecturer for 2005 – 2007 lecturing on the life of James Clerk Maxwell. f. Ulrich Mescheder was born on March 16, 1957 in Stukenbrock, Germany. He received his Dipl. Phys., Ph.D. (Dr. rer nat) in 1982 after study at University Bielefeld and Marburg (focus on solid state physics). He has been a professor at Hochschule Furtwangen – University Department Computer and Electrical Engineering and Institute for Applied Research, Furtwangen. His research activities include Microtechnology/Micromachining, Microsystems (MEMS), and Nanotechnology. He is a member of German Physical society, Verband deutscher Hochschullehrer and IEEE. He is currently the Executive Vice-president for Research Director Institute for Applied Research, Director Competence Center for Microfabrication and Systemintegration, Baden Württemberg (ZeMiS) Vice-director Graduation school GenMik (University Freiburg) he has worked on „Optoelectrical Measurements of amorphous Silicon".

From1985-1991 he was with with the Philips Research Laboratory, Hamburg, Department Material Science, Thin film technology. He was a Visiting scientist at the Institute for Microstructuring Technology (IMT) in Berlin, working on technological developments for x-ray-lithography (mask technology and characterisation techniques).

Email: rautio@sonnetsoftware.com

Address: 100 Elwood Davis Road, North Syracuse, NY 13212

Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 Getting to NJIT

Time: 5:30PM to 7:00PM

Contact: Dr.-Ing. Ajay Kumar Poddar, (201) 560-3806 (akpoddar@ieee.org)

Prof. Edip Niver- (973)596-3542 (edip.niver@njit.edu)

Prof. Durgamadhav Misra (dmisra@njit.edu)

For Updates and Registration: Click Here

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February 27, 2014
The IEEE SAC Social

Co-sponsored by the Student Activities Committee

Open to ages 18+

$10 CHARGE AT THE DOOR

Agenda: Come out for our first ever social mixer for food, drinks, prizes, and awesomeness at Wicked Wolf in Hoboken. Oh and did we mention, it's college night?

This event is open to graduating college students, college grads, post-graduate students, IEEE members, and industry leaders.

Are you still reading this? Get your ticket, like this, share it, and invite everyone! facebook.com/ieeesac

This event is meant to bring together existing IEEE student members with recent IEEE graduates in industry, where the interaction will be centered around: continued IEEE participation post under-grad while also offering tips on getting into the working world.

Location: Wicked Wolf, 120 Sinatra Dr. Hoboken, NJ 07030

Getting to Wicked Wolf, Hoboken NJ

Time: 06:00PM to 08:30PM

Contact: John C Taylor john.taylor1204@gmail.com

For Updates and Registration: Click Here

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March 05, 2014
IEEE North Jersey Section EXCOM meeting - Clifton, NJ

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

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

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

Everyone is welcome to attend this meeting.

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

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

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

Click here for Map

Time: 06:00PM to 08:45PM

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

For Updates and Registration: Click Here

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 Program (formerly GOLD) 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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Welcome! New Members of the IEEE North Jersey Section

Name	Current IEEE Grade
Zeba Ahmad	Member
Okan Akyureklier	Member
Paula Alvarez	Student Member
Abdul Qadeer M. Awan	Graduate Student Member
Kevin Barresi	Student Member
Ioannis Broustis	Member
Donald Edward Crowe	Member
Manuel Enrique Diaz Granados	Student Member
Charan Teja Goka Veera Venkata	Graduate Student Member
Eyal Katz	Graduate Student Member
Christopher J. Loo	Student Member
Walter Marroquin	Student Member
Paul McGuire	Associate Member
Julian Mercado	Student Member
Samuel Nocum	Student Member
Senator Odeh	Graduate Student Member
Aaron Podell	Student Member
Apratim Rajendra	Member
Danny Vargas	Student Member
Brittany White	Graduate Student Member
Steve Y. Yang	Member
Max Edward Yelsky	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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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 where we exchange job leads and discuss emerging technologies. You will also have access to low-cost educational opportunities in a variety of topics areas, e.g. Hadoop, Big Data, Python, Cloud, Analytics, and Java. Educational opportunities are flexible and can be expanded to address additional topics of interest.

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

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

IEEE North Jersey Section Course
C# .NET Programming

Saturdays, March 1 through April1 19, 2014
Seven weekly classes (March 1, 8, 22, 29, April 5, 12, 19, 2014)
New Jersey Institute of Technology, Newark, New Jersey (Checks should not be mailed to this address)

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

The IEEE North Jersey Section is offering a course entitled "C# .NET Programming". Since 2004, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 1000+ C# .NET jobs (up from 720 last year) in the New York tri-state area daily! This course will cover the fundamentals of C# language, the .NET framework, window and web-based applications, ADO.NET, ASP.NET, and XML. It will be useful for anyone to develop applications based upon these tools.

You will receive the IEEE Certificate of Completion when you finish the course. Microsoft Corp. has MCAD and MCSD certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course.

Past attendees got jobs at AT&T, Goldman Sachs, IBM, Microsoft, Verizon, and other Fortune 500 firms.

Instructor: Donald Hsu, PhD., has been a corporate manager for 11 years and is an experienced trainer. Since 2006, he has trained 700+ people in C++, Java, Oracle, and WebLogic, XML, and C #.NET in 8 different organizations.

TOPICS

- Compare the enterprise development tools using Java to C# .NET
- Define Visual Studio .NET Version 2008 to latest
- Identify C# syntax, data type, control structures and common language runtime
- Distinguish methods, arrays, object-oriented programming
- Build graphical user interface, multithreading, files and streams
- Explain the benefit of using extensible markup language (XML)
- Select database, SQL server, and ADO .NET
- Choose ASP .NET, web forms, web services, advanced topics
- Present student Projects

WHERE: New Jersey Institute Technology, Newark, New Jersey (Getting to NJIT)

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

COST: IEEE members $500; Non-IEEE members $550.

Contact: Donald Hsu, yanyou@hotmail.com

REGISTRATION: C# .NET Programming

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

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

Name: _____   Email address _____

☐ Non-member

☐ IEEE Member   Member #:_____

Employer: _____

Employer Address: _____

_____

Home Address: _____

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

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

☐ I wish to receive IEEE Completion Certificate   Signature: _____

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

IEEE North Jersey Section Course
Project Management

Saturdays, March 1 through April1 19, 2014
Seven weekly classes (March 1, 8, 22, 29, April 5, 12, 19, 2014)

New Jersey Institute of Technology (Checks should not be mailed to this address)

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

   The North Jersey Section IEEE is offering a course entitled "Project Management". Dice.com lists *5000+* Project related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, pinpoint possible solutions, and provide information to keep the project under control. Using *Microsoft Project 2010* software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

   You will receive the IEEE Certificate of Achievement and earn 2 IEEE Continuing Education Units (CEUs) when you complete the course. You may wish to take the Certification exam in *Project Management* administered by Project Management Institute from the knowledge that you learned in this course. This is *not an exclusive PMP-PMI examination prep course.* No PDUs are issued for PMP eligibility. However, past attendees did successfully get the PMP certifications!

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

TOPICS

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

WHERE: New Jersey Institute Technology, Newark, New Jersey (Getting to NJIT)
WHEN: 7 Saturdays, March 1, 8, 22, 29, April 5, 12, 19, 2014, 9:00 am to 12:00 noon
COST: IEEE (& affiliate) members $500; Non-IEEE members $550.
CONTACT: Donald Hsu, yanyou@hotmail.com,

REGISTRATION: Project Management

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

Dr. Donald Hsu, Chair Education Committee, IEEE North Jersey Section, P. O. Box 2093, Fort Lee, New Jersey 07024.

Name: _____   Email address _____

☐ Non-member

☐ IEEE Member   Member #: _____   Member of: _____ technical society

Employer: _____

Employer Address: _____

Home address: _____

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

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

☐ I wish to receive the IEEE Completion Certificate   Signature: _____

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

2014 IEEE North Jersey Section Volunteer

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Chair - Russell Pepe
rcpepe@ieee.org

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

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

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cdp@ieee.org

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mondal@fdu.edu

Member-at-Large
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Goran Djuknic – gd@ieee.org
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        john.taylor1204@gmail.com

Junior Past Chair – Naresh Chand
chandnaresh@gmail.com

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niver@adm.njit.edu

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a.j.patel@ieee.org

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

Controls Society
Chair - David Haessig
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Instrumentation Measurement Society
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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

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schutze@compuserve.com

GOLD
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sean.kennedy@alcatel-lucent.com

Women in Engineering
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LIFE Members
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a.h.greenberg@ieee.org

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Vice-Chair - Ajay Poddar
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TPC Co-Chair – Ajay Poddar
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anisha_apte@ieee.org

Nominations
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a.j.patel@ieee.org

PACE
Chair - Richard Tax
rtax@verizon.net
Co-Chair – Paul E. Ward
peward@ieee.org

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steve.majkowski@alcatel-lucent.com
Vice-Chair – Jesse Colby
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Vive-Chair - Daniel Cerone
dcer@dcerone.com

Webmaster
Chair – Adriaan van Wijngaarden
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Industrial Liaison
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Intersection activities
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jm@joelmillerlaw.com