

The



IEEE Newsletter

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

NJ Communications Society:

Optimized Design and Management of Overlay Networks

On Monday, May 3, 2010, the IEEE North Jersey Section Communications Society Chapter will host a presentation entitled "Optimized Design and Management of Overlay Networks" by Dr. Anwar Walid.

About the Talk

A myriad of networking services have emerged in response to growing technological and social needs which are facilitated by building hierarchical overlays on existing network infrastructures. Examples of such overlays include content distribution and peer-to-peer networks, IPTV and virtual private networks. In addition to providing QoS and security features, network overlays are also important internetworking models for converged technologies such as IP over Optical. Ensuring service quality and efficient operation require optimization of the topological design, the cross-layer interfaces and the control and management functions. Dr. Walid will review work on designing optimized overlays which enable autonomic capabilities for select applications and converged technologies..

About the Speaker

Anwar Walid is a Distinguished Member of Technical Staff with the Mathematics of Networks and Communications Research Department at Bell Laboratories, Alcatel-Lucent, Murray Hill, NJ. He joined Bell Labs in 1992 after receiving the PhD degree in Electrical Engineering from Columbia University, New York. He developed theory and algorithms for network control and resource management for several products and has eight issued patents and six pending. He received the Best Paper Award in ACM SIGMETRICS. He contributed to the Internet Engineering Task Force (IETF), wrote RFC's and helped in creating the Traffic Engineering Working Group. He is editor of

IEEE/ACM Transactions on Networking and IEEE Network Magazine. Dr. Walid is an IEEE Fellow, and an elected member of Alcatel-Lucent Academy, Tau Beta Pi National Engineering Honor Society and IFIP Working Group 7.3.

All Welcome!

You do not have to be a member of the IEEE to attend.

Time: 6:00 PM, Monday, May 3, 2010, refreshments will be available starting at 5:45 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/about/visit/gettingtonjit.php>.

Information: Dr. Nirwan Ansari (973) 596-3670 (nirwan.ansari@njit.edu) or Yanchao Zhang (973) 642-7817. Also check <http://web.njit.edu/~ieeenj/comm.html> for the latest updates.

NJ SP Society:

Information Forensics: Steganalysis, Tampering Detection, and Others

On Tuesday, May 4, 2010, the IEEE North Jersey Section Signal Processing Chapter will host a presentation entitled "Information Forensics: Steganalysis, Tampering Detection, and others" by Dr. Yun Qing Shi.

About the Talk

Information forensics has become an active and formal research field in our digital age. In this talk, the concepts and research on image steganography and steganalysis are first introduced, followed by that on image tampering and detection of image tampering. Finally some other issues in information forensics are discussed.

About the Speaker

Dr. Yun Qing Shi (M'88-SM'92-F'05) obtained his BS degree and MS degree

from Shanghai Jiao Tong University, Shanghai, China; his MS and PhD degrees from University of Pittsburgh, PA. He has been part of the Department of Electrical and Computer Engineering at New Jersey Institute of Technology since 1987, and is now a professor there. His research interests include digital multimedia data hiding, steganalysis, forensics and information assurance, visual signal processing and communications, motion analysis, theory of multidimensional systems and signal processing. He is an author/coauthor of more than 200 papers, a book and four book chapters. He holds six US patents and has more than 20 US patents pending.

Dr. Shi is the founding Editor-in-Chief of LNCS Transactions on Data Hiding and Multimedia Security (Springer), an associate editor of journal on Multidimensional Systems and Signal Processing (Springer). He served as an associate editor of IEEE Transactions on Signal Processing and IEEE Transactions on Circuits and Systems (II), an associate editor of International Journal of Image and Graphics, and a guest editor of special issues for a few journals, a distinguished lecturer of IEEE CASS 02-03, the technical program chair of ICME07, co-technical chair of IWDW06, 07, 09, MMSP05, co-general chair of MMSP02. He is a member of a few IEEE technical committees, and a Fellow of IEEE.

All Welcome!

You do not have to be a member of the IEEE to attend.

Time: 6:00 PM, Tuesday, May 4, 2010. Free refreshments will be provided at 5:30 PM.

Place: Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, 1000 River Rd, Teaneck, NJ, http://www.fdu.edu/visitorcenter/directions/teaneck_map.html.

Information: Alfredo Tan, tan@fdu.edu, (201) 692-2324, and Hong Man, hman@stevens-tech.edu, (201) 216-5038.

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Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at [k.saracinello "AT" ieee.org](mailto:k.saracinello@ieee.org) or to *The IEEE Newsletter*, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (302) 683-7162.

IEEE NJ SECTION HOME PAGE

<http://web.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

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

REPORT ADDRESS CHANGES TO:

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Dr. Mengchu Zhou (zhou "AT" njit.edu)

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Russell Pepe at (201) 960-6796, rcpepe "AT" ieee.org.

NJ EDS/C&S:

An Indoor Positioning System Based on Global Positioning System Signals

On May 12, 2010, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk titled "An Indoor Positioning System Based on Global Positioning System Signals." The speaker will be Professor Ibrahim Tekin.

About the Talk

The Civil Global Positioning System (GPS) has widespread use in many areas including location based services in wireless communication, traffic management and medical emergency services. Owing to the latest technological advances, with an error of only a few meters, GPS receivers are able to successfully locate themselves outdoors. However, in indoor environments, the GPS signals are attenuated by the walls, windows, metallic infrastructure of the buildings such that, it is not possible to decode GPS signals for location finding.

In this talk, an indoor positioning system based on GPS infrastructure will be presented to solve indoor coverage problem. The proposed indoor positioning system consists of directional GPS antennas, RF GPS repeaters and a GPS receiver with improved positioning algorithms. The design and measurement of the directional GPS antenna and the GPS repeater will be discussed in detail. All the RF system components are integrated with improved algorithms for the evaluation of the overall system performance at an indoor site. Results of the experiments show that the proposed system can be used for indoor positioning and hence continuation of the GPS service can be expanded indoors with hardware (antennas + repeaters) additions to buildings and a software update to the standard GPS receivers where indoor coverage is needed.

About the Speaker

Dr. Ibrahim Tekin received his B.S and M.S degrees from the Electrical and Electronics Engineering Department of Middle East Technical University (METU) in 1990 and 1992, respectively. From 1993 to 1997, he was with the Electrical Engineering Department of the Ohio State University (OSU) where he received his PhD degree in 1997. During 1990-1993 he was a research assistant at METU, and from 1993 to 1997 he worked as a Graduate

Research Associate at the ElectroScience Laboratory, OSU. From 1997 to 2000, he worked as a researcher in Wireless Technology Lab of Bell Laboratories, Lucent Technologies. He has been with the Electronics Engineering program at Sabancı University, Istanbul since 2000. His research interests are in RF and microwave circuit design, UWB antennas and circuits, RFID antennas, GPS antennas, RFIC components such as power amplifiers, LNAs, VCOs, Software Defined Radio reconfigurable antennas and circuits. He is involved in various projects including linear RF power amplifier design, RFIC design for WLAN systems, RFID systems and time domain UWB Radar. Dr. Tekin is on his sabbatical leave at New Jersey Institute of Technology, Newark and NYU Poly, Brooklyn, USA. He is a member of the societies of IEEE Antennas and Propagation and IEEE Communications.

All Welcome!

You do not have to be a member of the IEEE to attend.

Time: 7:00 PM, Wednesday, May 12, 2010. Free buffet will begin at 6:15 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/about/visit/gettingtonjit.php>.

Information: Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Richard Snyder (973) 492-1207 (RS Microwave).

Elevate to Senior Member Grade!

To get information and an application to advance to Senior Member Grade, see <http://www.ieee.org/web/membership/senior-members/>. For further information or to find potential references, contact Mario Ogava, Membership Chair, at [m.ogava "AT" ieee.org](mailto:m.ogava@ieee.org).

IEEE North Jersey Section Activities

May 2010

May 2 – “NJ Section Awards Reception” - 3:00 to 6:00 PM at the Birchwood Manor, 111 North Jefferson Rd, Whippany, NJ. Anne Giedlinski (973) 377-3175.

May 3 – “Optimized Design and Management of Overlay Networks” by Dr. Anwar Walid, NJ Communications Society, 6:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Nirwan Ansari (973) 596-3670 (nirwan.ansari “AT” njit.edu) or Yanchao Zhang (973) 642-7817. Also check <http://web.njit.edu/~ieeenj/comm.html> for the latest updates.

May 4 – “Outdoor ITE-Global Deployment” by Don Gies, NJ IMS, 6:30 PM, Alcatel-Lucent, Oak Room in the Main Alcatel-Lucent Building, 600 Mountain Avenue, Murray Hill, NJ. Russell C. Pepe, 201-960-6796, rcpepe “AT” ieee.org.

May 4 – “Information Forensics: Steganalysis, Tampering Detection, and Others” by Dr. Yun Qing Shi, NJ SP, 6:00 PM, Auditorium M105, Muscarelle Center, Fairleigh Dickinson University, 1000 River Rd, Teaneck, NJ. Alfredo Tan, tan “AT” fdu.edu, (201) 692-2324, and Hong Man, hman “AT” stevens-tech.edu, (201) 216-5038.

May 5 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, Clifton Public Library - Allwood Branch, 44 Lyall Road, Clifton, NJ 07012. Russell Pepe at rcpepe “AT” ieee.org.

May 5 – “From Deep Trenches to Skyscrapers: A walk down Memory Lane” by Dr. Subramanian Iyer, NJ EDS/C&S, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Edip Niver, (973) 596-3542, Dr. Durga Misra, (973) 596-5739 (dmisra “AT” njit.edu), Har Dayal, (973) 633-4618 (har.dayal “AT” baesystems.com), or Kirit Dixit, (201) 669-7599, kdixit “AT” ieee.org.

May 12 – “Engineers Meet: The Upside of Downsizing” by Diane Young, NJ PACE, 6:30 PM to 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, PWARD1130 “AT” aol.com, Richard F. Tax, (201) 664-6954, rtax “AT” aea.org.

May 12 – “An Indoor Positioning System Based on Global Positioning System Signals” by Professor Ibrahim Tekin, NJ EDS/C&S, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Durga Misra (973) 596-5739 (dmisra “AT” njit.edu), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Richard Snyder (973) 492-1207 (RS Microwave).

May 26 – “Harnessing the Power of Words and Social Media - as Part of a Marketing Plan” by George Sierchio, NJ Consultants' Network, 6:30 PM, Morris County Library, 30 East Hanover Avenue, Whippany, NJ. Robert Walker, (973) 728-0344, or visit www.TechnologyOnTap.org.

Upcoming Meetings

June 2 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, Clifton Public Library - Allwood Branch, 44 Lyall Road, Clifton, NJ 07012. Russell Pepe at rcpepe “AT” ieee.org.

June 9 – “Engineers Meet: For a Members Social”, NJ PACE, 6:30 PM to 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, PWARD1130 “AT” aol.com, Richard F. Tax, (201) 664-6954, rtax “AT” aea.org.

Sep. 14 – “Selecting the Appropriate Environmental Test Chamber for Renewable Energy Applications” by Mark R. Chrusciel, NJ IMS, 6:30 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Russell C. Pepe, 201-960-6796, rcpepe “AT” ieee.org.

Oct. 9 – Dec. 4 – “Project Management” by Donald Hsu, PhD, 9:30 AM to 12:00 PM, NJIT, 161 Warren Street, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Oct. 20 – Dec. 15 – “C# .NET Programming” by Donald Hsu, PhD, 6:30 PM to 9:00 PM, NJIT, 161 Warren Street, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Members and Non-Members Welcome
PLEASE POST

NJ EDS/C&S:

From Deep Trenches to Skyscrapers: A walk down Memory Lane

On May 5, 2010, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk titled "From Deep Trenches to Skyscrapers: A walk down Memory Lane." The speaker will be Distinguished Lecturer, Dr. Subramanian Iyer.

About the Talk

Memory technology and the memory business has for many years been the engine that powered technological innovations in the semiconductors especially in the area of lithography and innovative micro-structural engineering. While stand-alone memory itself has been commoditized, when embedded in high performance logic it provides incredible leverage for high performance processors, network and mobile appliances, and almost every application. In this talk, we will explore the course of memory in systems, especially DRAM, integration of deep trench technology into high performance logic, the value it brings as well as the collateral advantages it has brought about in power management, noise decoupling, autonomic chip repair and its potential evolution into 3-dimensional chip technology.

About the Speaker

Subramanian S. Iyer is a Distinguished Engineer and Chief Technologist for the Semiconductor Research and Development Center, IBM Systems & Technology Group, and is responsible for technology development strategy, embedded memory and 3 Dimensional Integration. Until recently he was Director of 45nm CMOS Development. He obtained his B.Tech in Electrical Engineering at the Indian Institute of Technology, Bombay, and his MS and PhD in Electrical Engineering at the University of California at Los Angeles. He joined the IBM T. J. Watson Research Center in 1981 and was manager of the Exploratory Structures and Devices Group till 1994, when he founded SiBond LLC to develop and manufacture Silicon-on-insulator materials. He has been with the IBM Microelectronics Division since 1997. Dr. Iyer has received two Corporate awards and four Outstanding Technical Achievement awards at IBM for the development of the Titanium Salicide process, the fabrication of the first SiGe Heterojunction Bipolar Transistor, the development of embedded DRAM technology and the development of eFUSE technology. His current technical

interests and work lie in the area of 3-dimensional integration for memory sub-systems and the semiconductor roadmap at 22nm and beyond. He holds over 40 patents and has received 22 Invention Plateau awards at IBM and is a Master Inventor. He received the Distinguished Alumnus award from the Indian Institute of Technology, Bombay in 2004. Dr. Iyer has authored over 150 articles in technical journals and several book chapters and co-edited a book on bonded SOI. He has served as an Adjunct Professor of Electrical Engineering at Columbia University, NY. Dr. Iyer is a Fellow of IEEE and a Distinguished Lecturer of the IEEE and Chair of the mid-Hudson chapter of the Electron Device Society.

All Welcome!

You do not have to be a member of the IEEE to attend.

Time: 7:00 PM, Wednesday, May 5, 2010. Free buffet will begin at 6:15 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/about/visit/gettingtonjit.php>.

Information: Dr. Edip Niver, (973) 596-3542, Dr. Durga Misra, (973) 596-5739 (dmisra "AT" njit.edu), Har Dayal, (973) 633-4618 (har.dayal "AT" baesystems.com), or Kirit Dixit, (201) 669-7599, kdixit "AT" ieee.org.

Section PACE:

Engineers Meet:

The Upside of Downsizing

On Wednesday, May 12, 2010 the North Jersey Section Professional Activities Committee will host a meeting to host a meeting to discuss the "The Upside of Being Downsized." Our speaker will be Diane Young.

About the Meeting

If you have been downsized or fear that you may be, then you will want to attend this informative and thought-provoking seminar.

You will learn: How to turn a challenge into an opportunity by changing your outlook.

Through experiential exercises, how to set and achieve goals. Tips on how to survive and thrive in a down economy.

This is a discussion group that is designed to be fun and interactive. Handouts will be given so you may apply what you have learned long after the seminar has ended.

About the Speaker

Diane Young is a certified professional coach who focuses on both relationship and career transition coaching. She completed her studies at the Institute for Professional Excellence in Coaching (iPEC), a renowned training program accredited by the International Coach Federation (ICF).

The LYF Experience is the name of Diane's coaching practice and LYF stands for Love Yourself First. Diane has learned that success begins with self-love and self-acceptance. She works closely with her clients to help them let go of self-defeating thoughts and behaviors, discover their potential, take action and achieve their personal and career goals.

In response to this challenging economic climate, Diane founded and facilitates a support and networking group called The Unemployed Optimists where participants can connect and feel inspired and motivated during their transition. Feature stories on this group have appeared in The Record, The Star Ledger and Herald News and on News 12 NJ.

Diane's practice includes individual, couples and group coaching. She may be reached at diane@thelyfexperience.com.

All Welcome!

Members and students from all professional societies and engineering disciplines are welcome. We now have attendees from IEEE, ASME, NSPE, ASCE and AEA. For information about these groups see:

www.aea.org
www.ieeeusa.org/policy/care
www.ieeeusa.org
www.programmersguild.org
<http://web.njit.edu/~ieeenj/>
www.asme.org/sections/northjersey

CARE is the Congressional Advocacy Recruitment Effort CARE is a voluntary network of IEEE members who are interested in public policy. To help and for information go to www.ieeeusa.org/policy/care/.

Time: 6:30 PM to 9:00 PM, Wednesday, May 12, 2010. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

Information: Paul Ward, (973) 790-1625, PWARD1130 "AT" aol.com, Richard F. Tax, (201) 664-6954, rtax "AT" aea.org.

IEEE Region 1 Southern Area Entrepreneur's Day on May 8th

The IEEE Southern Area Region 1 in collaboration with Monmouth University's 'School of Science' & 'Center for Entrepreneurship' is proud to announce the planning of the event - 'IEEE Entrepreneurs Day' on May 8, 2010, to be held at Monmouth University auditorium. The seating capacity of the hall is about 300 though we are initially targeting a limit of enrollment at 200.

Given major restructuring of the industries we serve and the associated job cuts due to closing down of plants by major employers such as Bell Labs, Avaya, Ft. Monmouth (by 2011) in the Southern Area many engineers employed or otherwise are learning to be entrepreneurs entering into new areas of opportunities. With our federal government's focus on innovations in areas such as renewable energy and Bio Technology to get us out of the current economic conditions the question is how can our engineers plan to get a bit out of some \$200 billion dollars of stimulus money not yet spent.

The IEEE Entrepreneur's day will be of various seminars that will provide attendees to learn as to:

- How to leverage available resources from federal and state level
- What successful CEO/CTO did in making entry in these new areas
- What the government is trying to do from our Government leaders.

Invitations are being extended to Governor's office of NJ for his attendance as well as Congressional Representatives like Dr. Rush Holt who represents this area in Monmouth County.

Initially the event is open only to IEEE members with very nominal and non-refundable cost to cover lunch and coffee breaks, etc. The best way for non-members to assure a seat is to become a member and/or they participate once space is available. This collaboration with the departments of Monmouth University is a unique event bringing together Industry and Academic professionals in sponsoring a very high value activity.

More information will be available shortly. Contact: TK Srinivas at: tksieee@gmail.com.

NJ IMS:

Outdoor ITE-Global Deployment

On Tuesday, May 4, 2010, the IEEE North Jersey Section of the Instrumentation and Measurement Society (IMS) is hosting a talk entitled "Outdoor ITE-Global Deployment." The presenter will be Don Gies, MTS, Alcatel-Lucent Global Product Compliance Laboratory.

About the Talk

This talk explores aspects of IEC 60950-1, enclosure test standards (UL 50, CSA C22.2 No. 94, NEMA 250, IEC 60529, IEC 60950-22), and global electrical codes and wiring methods that impact outdoor ITE, and provides insight on how to juggle, compromise, and reconcile conflicting international requirements.

About the Speaker

Don Gies has been a Product Compliance Engineer for over 23 years. Since 1989, Mr. Gies has worked at AT&T-Bell Laboratories/Lucent Technologies/Alcatel-Lucent as a Product Safety Engineer, responsible for obtaining product safety certifications for his company's telephone and information processing equipment from domestic and international product safety organizations. Mr. Gies has become a leading subject matter expert for his company in the field of global product safety compliance, working primarily with Alcatel-Lucent's wireless base station equipment. Mr. Gies is a member of the Alcatel-Lucent Technical Academy. Prior to working at AT&T, Mr. Gies was a Tempest Engineer for Honeywell-Signal Analysis Center, where he worked on various secure communications projects for the US Army Communications -Electronics Command. Mr. Gies, a lifelong resident of the Jersey Shore, graduated from Rutgers University - College of Engineering as an Electrical Engineer. He is an iNARTE Certified Product Safety Engineer.

All Welcome!

Free admission. Members and non-members welcome.

Time: 6:30 PM, Tuesday, May 4, 2010. Free buffet will be provided at 5:30 PM.

Place: Alcatel-Lucent, Oak Room in the Main Alcatel-Lucent Building, 600 Mountain Avenue, Murray Hill, NJ 07974.

Information: Russell C. Pepe, 201-960-6796, rcpepe@at.ieee.org.

NJ IMS:

Selecting the Appropriate Environmental Test Chamber for Renewable Energy Applications

On Tuesday, September 14, 2010, the IEEE North Jersey Section of the Instrumentation and Measurement Society (IMS) is hosting a talk entitled, "Selecting the Appropriate Environmental Test Chamber for Renewable Energy Applications." The speaker will be Mark R. Chrusciel.

About the Talk

Properly defining your Environmental Chamber requirements will insure your best return on investment. An emphasis will be placed on the renewable energy markets, including a way to save up to 54% on your operating costs. Discussions on the effect of air flow on product temperature and ensuring all DUT's experience the same temperature gradients will be reviewed. With most solar panels carrying 20 year warranties, short cuts in testing could cost significant warranty dollars or damage to your company's reputation. The importance of safely processing hazardous materials will also be discussed.

About the Speaker

Mark R. Chrusciel has approximately 30 years of experience with environmental chambers and ovens and currently serves as Director for Cincinnati Sub Zero. His many years of experience in the quality, reliability and laboratory markets enables him to design, select and implement the proper thermal processing equipment for the application. Mark has a BS in Natural Sciences from Xavier University; has served on the board for the last 4 years of the ASTR conference (Accelerated Stress Test and Reliability); and is a senior member of the Institute of Environmental Science and Technology (IEST).

All Welcome!

Free admission. Members and non-members welcome.

Time: 6:30 PM, Tuesday, September 14, 2010. Free buffet will be provided at 5:30 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/about/visit/gettingtonjit.php>.

Information: Russell C. Pepe, (201) 960-6796, rcpepe@at.ieee.org.

NJ Consultants' Network:

Harnessing the Power of Words and Social Media - as Part of a Marketing Plan

The May 26, 2010 meeting of the IEEE Consultants' Network of Northern NJ features a presentation by George Sierchio, founder of Action Business Partners. The talk explores marketing methods utilizing power of social media.

About the Talk

Education is king. When you teach and inform people, you and your company become an expert. Putting your knowledge into words, such as in an article, allows for mass distribution to those seeking that expertise. And the internet is the key distributor.

Our discussion will go over how anyone can put together a comprehensive written piece in an hour or less and use various types of social media for quick and massive distribution as part of a comprehensive marketing plan. No writing skills are required.

About the Speaker

After owning several successful technology consulting businesses for 11 years, George Sierchio, the Consultant's Coach, founded Action Business Partners, Inc. in 2003 to tackle the needs of engineering and IT business owners. His focus is on coaching and advising these business owners to make them true entrepreneurs by structuring their companies top to bottom for maximized profits now, the ability to grow rapidly in any economic condition and adding business value to reach an exit strategy of profitable retirement in the future.

About the Consultants' Network

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

All Welcome!

Members and non-members are welcome.

Time: 6:30-8:30 PM. Wednesday, May 26, 2010.

Place: Morris County Library, 30 East Hanover Avenue, Whippany, NJ. Directions are available at www.mclib.info.

Information: For up-to-date meeting status, call Robert Walker, 973-728-0344, or visit our website, www.TechnologyOnTap.org.

NJ Section PACE:

Engineers Meet: For a Members Social

On Wednesday, June 9, 2010 the North Jersey Section Professional Activities Committee IEEE Members, students and guests will meet for a Social, with Pizza, soda & refreshments.

About the Meeting:

This meeting is about getting members of the Section together for a light evening of discussion and hospitality. Basically we can hold a brainstorming session to discuss future meetings and activities. This is a continuation of the past meeting's lively discussions. All are invited. We shall encourage North Jersey Section Ex-Com officers to attend. When they do, our Section membership will have an opportunity to meet with them on a first name basis. You can learn about what goes on at our Section Ex. Com. Meetings.

Bring your associates, friends and spouses for a relaxing, friendly meeting for our engineers.

About the Speaker:

Everyone will have an opportunity to express their views about the profession, jobs and opportunities or whatever.

All Welcome!

Members and students from all professional societies and engineering disciplines are welcome. We now have attendees from IEEE, ASME, NSPE, ASCE and AEA. For information about these groups see:

www.aea.org
www.ieeeusa.org/policy/care
www.ieeeusa.org
www.programmersguild.org
<http://web.njit.edu/~ieeenj/>
www.asme.org/sections/northjersey

CARE is the Congressional Advocacy Recruitment Effort CARE is a voluntary network of IEEE members who are interested in public policy. To help and for information go to www.ieeeusa.org/policy/care/.

Time: 6:30 PM to 9:00 PM, Wednesday, June 9, 2010. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

Information: Paul Ward, (973) 790-1625, PWARD1130 "AT" aol.com, Richard F. Tax, (201) 664-6954, rtax "AT" aea.org.

A Professional Certification in Wireless Communication Engineering Technologies (WCET) from IEEE

Are you part of the vibrant and ever - growing Mobile & Wireless Industry? If you are, then you confront continuous business innovation, technology evolution and new applications daily. Every trade show and publication brings news of smartphones launches, introductions of wireless virtual reality, self - organizing networks, higher order modulations, and machine - to - machine communications to name a few.

These fast - paced changes require of industry professionals to constantly learn, renew and review their skills, and refresh industry know - how. The IEEE WCET credential is here to help those professionals who wish to distinguish themselves in the marketplace, gain recognition by current and/or prospective employers and develop reputations in their professional networks as possessing up - to - date top - talent experience.

WCET is global in scope, and vendor - independent, and identifies those who are certified as having demonstrated competence and a thorough understanding of different key technologies in the wireless arena, local market implications of wireless communications, and new technology / standards development.

Behind WCET stands a high - caliber Core Team of IEEE experts, industry veterans, and technology innovators who developed WCET and keep it current. WCET is also guided by a very strong international Industry Advisory Board with representatives from top - tier OEMs, operators, and other industry players.

Make a 2010 resolution to accept the challenge to document your skills and to accelerate your professional development by taking the WCET exam in the Fall 2010. Details about candidate requirements, exam dates, registration, the practice exam, and many resources such as on - line tutorials, webinars, training, and articles to help you prepare for the exam are posted on our website - www.ieee-wcet.org.

For questions and more information, contact Elena M. Neira, CET Core Team, WCP Liaison, IEEE ComSoc, at elenaneira@comsoc.org or www.linkedin.com/in/elenaneira.

North Jersey Section Seeks Committee Chairs and Volunteers

The North Section is seeking new volunteers to help conduct business for the benefit of its membership. There are a variety of volunteer positions open and available. They range from long-term to short-term, from technical to non-technical, leadership or just participatory. For Society Chapter Chairs, you must be a member of the corresponding IEEE Society. You must be an active IEEE member to hold an elected office at the section level.

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 Dr. Chandra Gupta at [c.gupta "AT" ieee.org](mailto:c.gupta@ieee.org). You are welcome to attend the Section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Some committees needing volunteers include the following. Please contact the person indicated for additional information.

- Power Electronics Society Chapter Chair - contact [c.gupta](mailto:c.gupta@ieee.org) below.
- GOLD (Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed - contact [northjerseygold "AT" ieee.org](mailto:northjerseygold@ieee.org)
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact [kduncan "AT" ieee.org](mailto:kduncan@ieee.org)
- EMBS (Engineering in Medicine and Biology Society) invites new members and volunteers - contact RaquelPC@njit.edu if you are interested.
- Membership Development Committee Chair and Volunteers - contact [c.gupta](mailto:c.gupta@ieee.org) below.
- Student Activities Committee volunteers and committee members needed - contact [jignasa.ray "AT" ieee.org](mailto:jignasa.ray@ieee.org).

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://web.njit.edu/~ieeenj/>, or contact Dr. Chandra Gupta [c.gupta "AT" ieee.org](mailto:c.gupta@ieee.org).

News from IEEE-USA:

Employment Up for U.S. Electrical Engineers and Computer Professionals

Washington (27 April 2010) - In what could be a positive sign of recovery for the U.S. economy, employment in three high-tech job categories -- electrical and electronics engineers; software engineers; and computer scientists and systems analysts -- returned to levels last seen in 2008, according to data released this month by the Department of Labor's Bureau of Labor Statistics.

For electrical and electronics engineers (EEs), employment grew 7.8 percent from the fourth quarter of 2009 to the first quarter of 2010, and now stands 16.1 percent above its historical low in the first quarter of 2009. Software engineering employment was essentially unchanged quarter to quarter, but remains 5.3 percent above its first-quarter 2009 low.

For computer scientists and systems analysts, first-quarter employment grew 4.7 percent and is now 14.5 percent above its second-quarter 2009 low.

The unemployment rate for EEs has fallen from a high of 8.6 percent in the second quarter of last year to 4.6 percent in the first three months of 2010. In the other job categories, joblessness grew despite the stable or positive employment numbers.

For software engineers, the unemployment rate went from 4.1 percent to 5.5 percent quarter to quarter. During that same time, joblessness for computer scientists and systems analysts rose slightly (5.2 percent vs. 5 percent). This trend might indicate that displaced employees in these areas are again seeking jobs.

"As we watch for signs of recovery, we think it's important to focus on the employment numbers," IEEE-USA President Evelyn Hirt said. "Re-employed engineers, scientists and other technology professionals will help create more jobs and ratchet the economy forward."

Unemployed and at-risk IEEE members can find help at <http://www.ieeeusa.org/careers/help/>. Career enhancement resources are available at <http://www.ieeeusa.org/careers/>.

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 210,000 engineers, scientists and allied professionals who are U.S. members of IEEE. <http://www.ieeeusa.org>

Contact: Chris McManes
IEEE-USA Public Relations Manager
202-530-8356
c.mcmanes@ieee.org

From the North Jersey Section's Education Committee:

Hot courses can enhance your position in the job market

IEEE North Jersey Education Committee ran programming and management courses since 1993. 236 IEEE members and non-members completed these courses. Benefits: Some got jobs at AT&T and Microsoft Corporation.

We need hot courses, instructors and classrooms. If you can teach a hot course (any course that can get people jobs), email your one-page abstract and your resume. If your NJ firm can provide a conference room, evening or Saturday morning, contact Donald Hsu, Chair, [yanyou "AT" hotmail.com](mailto:yanyou@hotmail.com). Thank-you and act NOW!

LISAT2010

Sixth Annual IEEE Long Island Systems, Applications and Technology Conference

Friday, May 7, 2010

The Institute for Research & Technology Transfer at Farmingdale State College
State University of New York - Farmingdale, NY

CALL FOR PAPERS, PRESENTATIONS, EXHIBITORS and STUDENT PAPERS

The Long Island Systems, Applications and Technology (LISAT) Conference features several parallel professional tracks including topics in Systems, Applications, and Technology, along with an Exhibit Hall. We are currently soliciting submissions for participation in both the Technical Program and the Exhibit Hall, and are interested in papers, presentations, and exhibits that showcase the development and use of technology by local organizations. LISAT 2010 will also provide the opportunity for select student papers to be presented. Undergraduate and graduate students are encouraged to submit papers in an area of their interest or current work.

Preliminary acceptance to the Technical Program will be based on a 300-to-500-word abstract. Authors of accepted abstracts will be required to provide a six (6) page IEEE standard manuscript (in MS Word format) for publication in IEEE *Xplore*, and will be required to make a power point presentation at the conference. Manuscripts are subject to the LISAT Technical Program Committee's peer review and may require revision prior to final acceptance. Important dates for the Technical Program are:

Oct 31, 2009:	Abstracts due (300-to-500 words)
Nov 15, 2009:	Notification of accepted abstracts
Nov 30, 2009:	Biographies of authors and ½-page presentation outlines due
Jan 15, 2010:	Manuscripts for publication (MS Word) and copyright releases due
Jan 30, 2010:	Notification of final acceptance of manuscripts
Feb 15, 2010:	Presenter Registration Fee and two (2) sentence presentation descriptions due
Apr 1, 2010:	Power Point slide presentation due
May 7, 2010:	LISAT2010 Conference

All submissions must include the author's full names, affiliations, postal addresses, phone numbers, and email addresses. Submissions should be emailed to the LISAT Technical Program Committee at **LISATprogram@ieee.org**. Detailed instructions on submission, manuscript and presentation templates, and information on the conference, is available on the LISAT web site at <http://ewh.ieee.org/conf/lisat>

At least one author of *each* paper/presentation must register for the Conference and will be expected to provide a 20-minute presentation at the conference followed by 5 minutes of Q&A. Longer presentations will be considered. One presenting author will be allowed to register at a discounted rate. A limited number of tutorial and application presentations which will not be published by the IEEE may also be accepted

While LISAT welcomes a wide variety of papers in systems, applications, and technology, some examples of topics of particular interest are: *Homeland Defense, Alternate Energy Sources, Green Building Technologies, Mobile Communications, Microwave Technology, Electromagnetic Compatibility, Mobile Ad Hoc Networking, Network Security, Sensor Fusion, Antenna Systems and Processing, Radio Locationing, Radar Systems and Techniques, and Medical Electronics.*

For information on **Exhibiting** at LISAT, please contact: Fred Kruger at f.m.kruger@ieee.org
For all other information contact LISAT2010 Conference Chair: Dave Mesecher at d.mesecher@ieee.org or
Conference Co-Chair Charles Rubenstein at c.rubenstein@ieee.org

LISAT is sponsored by the IEEE Long Island Section and its Technical Society Chapters and IEEE Region 1, in cooperation with the Institute for Research & Technology Transfer (IRTT) at the Farmingdale State College (SUNY).

Releases and Approvals: *This conference will be unclassified and attended by both US and non-US persons. It is the author's responsibility to obtain all required company and government releases and approvals prior to making a paper submission. A statement that such releases and approvals have been obtained as well as a completed IEEE Copyright Form (signed by the submitting author) must accompany the manuscript of each accepted paper.*

*The National Computational Science Institute
and
New Jersey Institute For Modeling and Visualization
present*

A Kinder, Gentler Introduction to High Performance Computing Applications

3rd Annual Week-Long Workshop for Researchers and Educators

Kean University, Union, NJ

June 28 - July 2, 2010

Cost: FREE

Do you want to provide your students experiences with modern computational tools in your discipline? Do you want to explore research projects in high performance computing for your undergrads? Do you want to learn more about how common computational tools in your field run on large clusters? Do you want to explore visualization for datasets large and small?

Do you want a week of intensive learning away from your office, department meetings, and other work responsibilities?

The New Jersey Institute of Modeling and Visualization, in partnership with the National Computational Science Institute, is hosting a week-long workshop on high-performance computing (HPC) applications at Kean University from June 28th to July 2nd.

Our goal is to catalyze the infusion of HPC into all aspects of the undergraduate curriculum. An abiding interest in bringing the HPC paradigm to the next generation of engineers, mathematicians and scientists is the only essential prerequisite for attendance. The more diverse the backgrounds and interests of the workshop participants are, the richer the experience will be for everyone.

Accordingly, we anticipate having sessions that include everything from a focused introduction to supercomputing to breakout sessions in application areas determined by participant interest to advice about and support for building tools in widespread use among the scientific computing community.

This workshop will focus on helping faculty with the process of moving problems in their research, classroom, and student advising from the Desktop to High Performance Computing systems. With a focus on applications, participants will gain experience using a variety of HPC tools on a 130 node, 1040 core cluster and advanced visualization hardware.

Much of the content will be cross-disciplinary, focusing on the details of running problems on HPC hardware (technical issues related to logging on and executing programs, schedulers, and realistic expectations of speedup,) as well as visualization tools and cross-disciplinary mathematical tools.

Participants are encouraged to bring their own problems to the workshop as well, and we will poll participants ahead of time with regards to discipline specific programs that should also be demonstrated.

Familiarity with either C or FORTRAN programming is encouraged, but not essential, as the focus is on software tools. Participants are encouraged to have undergraduates enroll in and attend the workshop alongside them as part of a faculty-led team.

Additionally, specialized content will be selected based on applicant interest in a variety of parallel sessions, using domain specific applications in computational chemistry, physics, biology, and engineering.

This tutorial workshop is *FREE* (except you have to pay your own transportation costs to and from the workshop venue), and we'll feed you and house you at no charge.

For more information, contact Prof. David Joiner (djoiner@kean.edu).

For registration:

<http://www.computationalscience.org/>

Also be sure to check out other great workshop opportunities in the NCSI 2010 Summer Series at

<http://www.computationalscience.org/>

IEEE North Jersey Section Course C# .NET Programming

Wednesday, October 20, 2010 through December 15, 2010
Eight weekly classes (October 20, 27, November 3, 10, 17, December 1, 8, 15, 2010)
Location: New Jersey Institute of Technology
Newark, New Jersey 07102 (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 "C# .NET Programming". Since 2004, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 1000+ C# .NET jobs 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 MCS D certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course.

Instructor: **Donald Hsu, PhD**, has been a corporate manager for 11 years and is an experienced trainer. Since 2004, he has trained 850+ people in C++, Java, WebLogic, Database, XML, and C# .NET courses in 8 organizations.

TOPICS

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

WHERE: New Jersey Institute of Technology, Newark, NJ
WHEN: Eight evenings, October 20, 27, November 3, 10, 17, December 1, 8, 15, 2010, 6:30 to 9:00 PM.
COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.
CONTACT: Donald Hsu, yanyou "AT" hotmail.com

REGISTRATION: C# .NET Programming

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

As soon as the completed registration form and the payment are received, you are officially registered for this course. Registration status will be confirmed by email.

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Project Management

*Saturday Mornings, October 9, 2010 through December 4, 2010
Eight weekly classes (October 9, 16, 23, 30, November 6, 13, 20, December 4, 2010)
New Jersey Institute Technology, Newark, New Jersey
(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 "Project Management". Dice.com lists 4,000+ 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 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 completion when you finish the course. You may wish to take two Certification exams, one 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. CEU credits would be given by IEEE).

Instructor: **Donald Hsu, PhD**, has been a corporate manager for 11 years and is an experienced trainer. Since 2003, he has trained 900+ people in Contract Procurement, IT Project+, MS Project, and Project Management courses in eleven organizations.

TOPICS

1. Explain the need for a project manager
2. Define SOW, PERT, GANTT, CPM, and Scope of the project
3. Identify the team members, resources and plan for the strategy
4. Calculate schedule, budget variances, and monitor project progress
5. Manage changes, estimates, and communications
6. Set a baseline, import tasks from MS Excel, export Project files to MS Word
7. Create and modify custom reports, templates and combination views
8. Share resources and create a master plan loaded to Project Server
9. Approve updates and conclude a project plan
10. Analyze global E-Commerce and present student Projects

WHERE: New Jersey Institute Technology, Newark, NJ.

WHEN: 8 Saturdays, October 9, 16, 23, 30, November 6, 13, 20, December 4, 2010, 9:30 AM - 12:00 noon.

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

CONTACT: Donald Hsu: [yanyou "AT" hotmail.com](mailto:yanyou@AT@hotmail.com)

REGISTRATION: Project Management

Please mail the registration form with the check (**Checks payable to "North Jersey Section IEEE"**) to
Donald Hsu, Chair Education Committee, IEEE North Jersey Section, P. O. Box 2093, Fort Lee, NJ 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**

As soon as a completed registration form and the payment are received, you are officially registered for this course. Registration status will be notified by email.

I wish to receive IEEE Completion Certificate

Signature: _____