

The *Pulse* of Long Island



April 1, 2006 - Vol. 56 No. 4

Chairperson's Message

By David Wolff
dwolff@ieee.org



On April 7th the Long Island section is holding its annual Awards Banquet at the Huntington Hilton. At this event we recognize the outstanding contributions of our member engineers and scientists across Long Island. The award categories include Section Awards, Regional Awards and new Fellow Awards. We also recognize the members of our Executive Committee who work diligently in the service of our IEEE membership. Please take a moment to review the 2006 awardees that are listed in this newsletter. In addition, I encourage you to submit a nomination for consideration by our 2007 Awards Committee. We have many highly qualified individuals in our section that deserve recognition and it is incumbent upon all of us to seek out and celebrate their contributions. Our Awards Banquet has been significantly upgraded in recent years. We have moved the event from Sunday afternoon to Friday evening and made many improvements that make it a very enjoyable social gathering that attracts more than 200 attendees. Please consider attending our Banquet and encourage your employer to become a sponsor. For more information, including a photo gallery from previous events, consult our website www.ieee.li and click on "Awards".

Generally speaking, recognition is a highly important aspect of any successful endeavor. Recognition can take many forms from the intangible and incidental offering of an appreciative comment to a formal celebration of accomplishment such as our Awards Banquet. In the business world, it has been repeatedly demonstrated that recognition contributes strongly to improved employee performance, retention, and job satisfaction. These are directly linked to better corporate financial performance and customer satisfaction. All successful leaders integrate recognition into their agenda and provide regular reinforcement of positive behaviors. But it occurs to me that many do not realize that the act of recognition – even the most basic incidental comment – is a skill that is not always so easy. It requires a certain emotional energy to deliver a compliment and often we underestimate what is involved in doing what would seem to be a very simple thing. My message is to remember to integrate recognition into your daily routine – it fosters cooperation and contributes to a successful work environment - but also remember to recognize in yourself the ability to do it and to be good at it. Recognizing that ability in turns strengthens our own sense of self and others. I hasten to add that while many of us have acquired the skill of recognition in the work place, we often fail to see its importance in our personal lives. Frequent recognition of our friends and loved ones is essential to the proper development and maintenance of the relationships that we most cherish.

In the spirit of recognition I would like to recognize one of the ablest of our IEEE colleagues, Babak Beheshti, who has served as our PULSE editor and business manager for the past 5 years. Babak, who contributes mightily to the success of the IEEE both at the section and regional level, is passing the baton of PULSE responsibility to Prentiss Aguilar, who has kindly agreed to succeed him. We thank Babak for all his hard work (50 issues worth by my count) and appreciate Prentiss for stepping up to the plate.

Finally, I would like to ask for your support for our upcoming Long Island Systems, Applications and Technology (LISAT) conference to be held on May 5, 2006 at Farmingdale State University of New York. We hope this conference, which is in its second year, will become a benchmark event for Long Island technology. We have assembled an outstanding technical program that will benefit a diverse audience. Many of our volunteers have worked very hard to make LISAT 2006 successful. Please attend this event as it is an important venue for the Long Island section, both from a technical and financial perspective. For more information go to www.ieee.li and click on LISAT 06.

The PULSE is now available on-line!

To get the on-line PULSE and get up-to-date information about the Section, visit our web site at: **www.IEEE.LI**

You can also register for IEEE LI Section events online at this web site!

LISAT2006

Long Island Systems, Applications, and Technology

Friday, May 5, 2006 9am-5pm

The IEEE Long Island Section, in cooperation with its Technical Society Chapters and IEEE Region 1, will be holding the **2006 Long Island Systems, Applications, and Technology Conference (LISAT2006)** on Friday, May 5, 2006, in Lupton Hall's **Institute for Research & Technology Transfer (IRTT)**, Farmingdale State University, 2350 Broadhollow Road, Farmingdale, New York.

This second annual LISAT Conference will feature presentations in three parallel tracks that highlight new and interesting work on a variety of electronic systems, technologies, and applications. The Conference focuses on LI development, but also includes several international papers, and covers topics in state-of-the-art communications, RF technology, electromagnetic compatibility, and advanced software techniques, and a cutting edge paper on hurricane suppression. The lunch period program includes a tour of the research being undertaken in Farmingdale State's Institute for Research & Technology Transfer will be organized by Dr. Hazem Tawfik or a presentation "How to Select a Consultant."

Conference Registration *

(Includes lunch, breaks, and Proceedings)

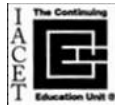


Farmingdale State University OF NEW YORK

Member type	Until April 1	After April 1
IEEE Members	\$ 125	\$150
Non-members	\$175	\$200
IEEE Student & Life	\$ 50	\$ 75

Exhibit Spaces Still Available
f.m.kruger@ieee.org

***Up to 0.6 CEU Credits Available (add \$15)**



IEEE is an Authorized CEU Provider of the International Association for Continuing Education and Training (IACET) IACET Provider # 1255 -- NY State CE Provider #100996

Please send name, email & address with check made out to "IEEE Long Island Section": Dr. Charles Rubenstein, Conference Chair, 90 County Line Road, Massapequa, NY 11758
Answering Machine/Fax: +1 516 598-4619

For Technical Program and other information go to <http://www.ieee.li/lisat>

Long Island Section Officers

Chair..... David Wolff
1st Vice Chair.... Ted Pappas
2nd Vice Chair... William DeAgro
Secretary..... Lucyna Plaskota
Treasurer..... **Brian Quinn**

Address All Correspondence to:

PULSE EDITOR

Prentis Aguilar
998 Old Country Rd, Ste C-212
Plainview, NY 11803
Phone: 631-454-9080
Email: pa@prentis.com

The PULSE of Long Island is published monthly except July and August by the Institute of Electrical and Electronics Engineers, Inc. Headquarters: 445 Hoes Lane, Piscataway, NJ 08855-1331. \$1.00 per member per year (included in annual dues) for each member of the Long Island Section. Periodical postage paid at New York, NY, and at additional mailing offices. Postmaster send address changes to IEEE PULSE, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. (USPS 450-540). The opinions expressed in this newsletter are those of the authors, and no endorsement by the Institute, its officials, or its members is implied.

Send Address Changes to:

The PULSE of Long Island
phone: (800) 678-IEEE
PO BOX 1331
PISCATAWAY NJ 08855-1331

PULSE Deadlines

For May 2006 04-06-06
For June 2006 05-05-06

Consultants Network of LI

The Consultants Network of LI maintains a referral service of Engineering, Computer, Managerial and Technical Professionals. Call or write for more information. There is no charge to the client for this service.
Voice Mail 516-379-1678
IEEE Consultants Network of Long Island
PO Box 411 Malverne NY 11565-0411
www.consult-li.com

PULSE ADVERTISING RATES

Full Page.....\$675.00 per issue
Half Page.....\$530.00 per issue
1/3 Page \$380.00 per issue
Business Card.....\$130.00 per issue

other size ads.....Contact the editor

IEEE Long Island Section Calendar

(No membership requirements, no registration, no fees at meeting unless otherwise noted.)

Please visit our website at www.ieee.li and click on the calendar for online registration (as available) and for listing updates

Apr. 4, 2006 – Lecture, "Broadband over Powerlines", by Ed. Hare of ARRL, and ANSI/IEEE C63 member. Presentation begins at 6:30 pm; snacks, beverages at 6:00 pm. Sponsor: IEEE EMC Society. Location: BAE Systems, 450 Pulaski Road, Greenlawn. Meeting is free and open to US citizens who register in advance; visit www.ieee.li.

Apr. 5, 2006 - A lecture entitled "CPR" by Norman Weingart and sponsored by the IEEE Consultants Network of Long Island will be held at Briarcliffe College, The Great Room, 1055 Stewart Avenue, Bethpage, NY. The meeting begins at 7:00 PM. The meeting is open to the public and no pre-registration is required. See the announcement in this issue for details. For additional info, contact John Dunn at ambertec@ieee.org or at 516-378-2149.

April 6, 2006 - The IEEE Antennas & Propagation Society will be hosting a Distinguished Lecture by Dr. Nicholas E. Buris of Motorola Labs at BAE Systems, 450 E. Pulaski Rd. Greenlawn NY. The title of the talk is "Electromagnetic Design for Wireless Applications and Multidisciplinary Optimization". The meeting is open and free to all U.S Citizens.

April 7, 2006 – Long Island Section Awards Banquet. Huntington Hilton. Route 110, Melville. 6PM; visit www.ieee.li/

April 18, 2006 - "Architectural Techniques for Interoperability and Coexistence", by Robert Gezelter, 6:00 to 8:30 PM, located at Telephonics Corporation on Route 110 in Farmingdale, New York. Please register via internet in the calendar section of <http://www.ieee.li/calendar.htm>. Contact Daniel Rogers, Computer Society Chair of the IEEE LIS for more info at drogers@ieee.org."

April 24, 2006 - Long Island Section Executive Committee (EXCOM) meeting at 6:00 PM, Telephonics Corp. on Route 110 in Farmingdale – This meeting is OPEN and FREE TO ALL IEEE members – Please contact Dan Rogers for reserving a space in the meeting (drogers@ieee.org).

May 1, 2006—The Long Island Chapter of the IEEE Circuits and Systems (CAS) Society is presenting a lecture titled: "Passive Network Synthesis: Camelot in our Grasp". Presentation begins at 6:30pm, snacks at 6:00pm. Location is Telebyte, Inc 270 Pulaski Road Greenlawn, NY 11740

May 5, 2006 – Long Island System, Application and Technology Conference. Farmingdale State University of NY, 2350 Broadhollow Road, Farmingdale, NY. Lupton Hall. <http://www.ieee.li/lisat> .

May 9, 2006 – "Solving The Galvanic Corrosion Issue In EMI Shielding" presented by Harry Fuerhaupter, of Potter Industries, Inc. A lecture sponsored by the IEEE EMC Society, will be held at BAE Systems Inc, 450 Pulaski Road Greenlawn, NY. Registration and refreshments at 6 PM and the lecture begins at 6:30 PM. The lecture is open to US citizens, but registration is required. For additional info, contact the lecture coordinator, Santo Mazzola at mazzolas@ieee.org or at 631-262-8367.

May, 9-11, 2006 – Electro 2006. The New Boston Convention & Exhibition Center - South Boston, Massachusetts. <http://www.nepconeast.com/> .

Award Night 2006 Awardees Congratulations!

Aleksey Bolotnikov, Brookhaven National Labs -Long Island Section Charles Hirsch Award

Peter Djuric, SUNY Stony Brook-Fellow Award

David Hernandez, Northrop Grumman Corp. Long Island Section Outstanding -Young Engineer Award

Peter Eckstein, Northrop Grumman Corp.-Enhancement of IEEE in Industry and Community Service

Richard Krabak, Telephonics Corporation Region 1 Award for New Technical Concepts in Electrical Engineering

Richard Kumpfbeck, BAE Systems-Long Island Section Harold Wheeler Award

Serge Luryi &

K. Wendy Tang, SUNY Stony Brook-Long Island Section Athanasios Papoulis Award

Thomas Robertazzi, SUNY Stony - Brook Fellow Award

Daniel Rogers, Telephonics Corporation -Long Island Section Alex Grunwald Award

Charles P. Rubenstein, Pratt Institute -Enhancement of IEEE in Industry and Community

Charles Vozzo, Telephonics Corporation Region 1 Award for Electrical Engineering Management

Next Year's Section and Other Awards

I am sure that by now you are all aware of our **April 7** Annual Awards Banquet where 12 of our members will be honored. Our Awards Committee is already looking for candidates for next year's honorees. All members of our Section are encouraged to nominate worthy candidates. Awards are given for a variety of technical, managerial, professional and educational accomplishments. I particularly would like engineers working in some of our smaller companies to make our Section's Awards Committee aware of deserving people.

Information on our Section's Awards can be obtained on our Section's website (www.ieee.li/ and click on Awards). Information on Region 1 Awards can be obtained on the Region 1 website (www.ewh.ieee.org/reg/1/). Please contact me if you wish to nominate anyone. Contact me directly if you wish to nominate a Fellow. I would be happy to answer any questions and make you more familiar with the processes relating to all of these awards.

Jesse Taub
Awards Committee Chairman,
IEEE, Long Island Section
jjtaub@aol.com

EDA
Ad

While working in the lab late one night...

Noise on waveform!

Source impedance off again!

Tweak the capacitor again?

Now what?

Another test completed on time.

WAITING TOO LONG FOR LIGHTNING TESTING RESULTS?

Earlier that day at Retlif...



RETLIF GETS RESULTS...FAST!

Retlif tests to virtually every national and international lightning susceptibility standard, quickly, accurately and with repeatability. Our true state-of-the-art, computer based, programmable test instrumentation generates a wide range of single stroke, multi-stroke and multi-burst waveforms up to and exceeding Level 5 of RTCA/DO-160.

Lightning induced transient susceptibility testing the Retlif way...repeatable, technically correct, on time, on budget.

Applicable Standards:

RTCA/DO-160
SAE ARP5412/5413
SAE AE4L
MIL-STD-1757
FAA AC:20-136
Boeing D6-16050-5
Airbus A380
EUROCEA/ED-14E

Put us to the test.SM



RETLIF
TESTING
LABORATORIES

795 Marconi Avenue, Ronkonkoma, NY USA 11779
Tel: (631) 737-1500 • Fax: (631) 737-1497
www.retlif.com • E-mail: sales@retlif.com
Additional locations in New Hampshire & Washington D.C.

Professional Activities Report
By: Irwin Weitman, P.E., PACE Chairman

NSPE Opposes EPA Rule to Remove PE Certification Requirement

In December, the Environmental Protection Agency announced proposed amendments concerning oil spill plan requirements under the Spill Prevention, Control, and Countermeasure rule. EPA is proposing amendments to its Oil Pollution Prevention regulation (40 CFR part 112) to provide an option to allow the owner or operator of small oil storage facilities to self-certify the facility's Spill Prevention, Control, and Countermeasures Plan. Current law requires certification of the plan by a licensed professional engineer (PE). In order to qualify for self-certification, a facility would have to meet the following criteria: Have an aggregate facility oil storage capacity of 10,000 gallons or less; and Have had no discharges during the 10 years prior to self-certification or since becoming subject to the SPCC requirements if less than ten years. (Facilities that have been subject to SPCC for less than ten years, including new facilities, would need to demonstrate no discharges only for the period of time they have been subject to the SPCC rule.)

A New Gust of Wind Projects Across the U.S.

Christian Science Monitor (01/19/06) P. 2; Clayton, Mark

A new report suggests that the U.S. wind power market is rapidly expanding and could soon become the world's largest. A study by Godfrey Chua, research director at Emerging Energy Research, predicts that wind power nationwide will grow by 40 percent in 2006, representing 3,400 Mw of new generation. The United States and Canada combined may experience a growth of 4,250 Mw this year, compared to 2,600 last year. A 2007 tax credit renewal by Congress signifies that the industry might install 6,000 Mw by 2010, according to the study. But because wind power provides electricity sporadically, its role in the nation's energy mix is limited; some believe wind power might ultimately comprise 5 percent of total U.S. generation capacity. Drivers of the wind power industry include 22 states' implementation of "renewable portfolio standards" that call for utilities to obtain power from renewable sources. Chua also cites the influx of Fortune 500 companies that provide a bigger financial, political, and corporate impact compared to the pioneering "cowboy" developers. In addition, wind power is becoming more cost-effective due to technology advances, costing 4 cents to 5 cents per kilowatt hour (kwh) in 2004, and the addition of the tax credit reduces that price by a further 1.9 cents per kwh. This makes wind power competitive with natural gas and coal and is even encouraging states without special regulations or incentives to expand their wind power capacity, says Randall Swisher of the American Wind Energy Association.

3/4 page

IEEE CONSULT-
ANTS NETWORK
LONG ISLAND
AD



LISAT2006 Technical Program

—INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Long Island Systems, Applications and Technology Conference

The IEEE Long Island Section's Annual Conference

May 5, 2006

Farmingdale State University of NY
Please inquire with Charles Rubenstein

LISAT2006

Organizing Committee:

GENERAL CHAIR:

Charles Rubenstein, Pratt Institute
<c.rubenstein@ieee.org>

VICE CHAIR:

Babak Beheshti, NYIT

TECHNICAL Co-CHAIRS:

Jesse Taub, Independent Consultant
Dave Mesecher, Northrop Grumman Corp

HONORARY CHAIRS:

Keven J. McSweeney - President,
Telephonics Command System Division
Jonathan Gibraltar - President,
Farmingdale State University

CONFERENCE SPONSORS:

Region 1 Director Barry Shoop, USMA
LI Section Chair David L. Wolff, BAE Systems

SECRETARY:

Lucyana Plaskota, Pall Corporation

TREASURER:

Brian Quinn, Verizon

PUBLICITY CHAIR:

Mark Sadick, Sag Harbor Industries, Inc.

EXHIBITS CHAIR:

Frederick Kruger, Independent Consultant

CEUs CHAIR:

Irwin Weitman, Independent Consultant

FACILITIES CHAIR:

John Fiorillo, Farmingdale State University

STUDENT ACTIVITIES CHAIR:

Roman Khazanovich, BAE Systems

LONG ISLAND SECTION CHAPTER CHAIRS

SOCIETY COORDINATOR:

Ted Pappas

Aerospace and Electronic Systems

Richard S. Pierro

Antennas & Propagation

Kurt Vetter

Circuits and Systems

Arthur Williams [Ken Schneider (Vice Chair)]

Communications (ComSoc)

Dave Mesecher [Brian Quinn (Vice Chair)]

Computer

Daniel Rogers

Electromagnetic Compatibility

David Sterner [Santo Mazzola (Vice Chair)]

Engineering in Medicine and Biology

Joel H. Levitt (New York)

Instrumentation and Measurement

Ken Jacobsen (New York)

Lasers and Electro-Optics (LEOS)

Efrain Avila [Gregory Hovagim (Vice Chair)]

Microwave Theory and Techniques

James Colotti

Nuclear and Plasma Sciences

Bo Yu

Power Engineering & Industrial Applications

Ralph Mazatta (New York)

Signal Processing

James Voulgarakis

Vehicular Technology

Arlene W. Zhang

Web Site URL:

<http://www.ieee.li/lisat/>

Nasrin Amiri and Keyvan Forooghi; Tarbiat Modares University, Iran
A Compact Dual-Polarized Microstrip Array Antenna for GSM900 Base Station

Babak Beheshti, New York Institute of Technology
Performance Analysis of Software Implementation of a 3GPP Compliant Turbo Decoder

Paul Bishop; Tektronix
Characterizing PLLs Using Spectrum Analyzers Station

Phillip S. Carter Jr:
Voltage and Current Transferring Properties of Ninety Degree Phase Shift Networks which are Independent of Load Impedance or Admittance and Their Application to Various RF Circuits and Antenna Systems Station

James Colotti; Telephonics
EMC Design Fundamentals

Jude D'Souza and Paul A. Stripe; New York Institute of Technology
A Low Cost Highly Reliable Virtual Network Storage System

Gary Fenical; Laird Technologies
Neo-Developments in Shielding Materials

Adnan Gundel; Telephonics
High Performance Low Phase Noise PLL Clock Synthesizer with LVDS Outputs

Vinay Kulkarni; University of Massachusetts
Control of Electromechanical Coupling in Stacked Crystal Filters

Sunil Kumar and Kashyap Kambhatia; Clarkson University
MTSR: A Multi-Hop Transport Layer Scheme for End-to-End Reliability in Heterogeneous WSA

Wing C. Kwong; Hofstra University, Ivan Glesk, Varghese Baby, Camille S. Bres, and Paul R. Prucnal; Princeton University
Design of an Asynchronous Wavelength-Time Optical CDMA Testbed

Richard LaRosa
Hurricane Suppression by Sea Surface Cooling

Engin Masazade, Mehmet Keskinöz, and Ozgur Gurbuz; Sabanci University, Turkey
Proportional Time Sharing with Frame Size Adaptation of MB-OFDM Based UWB PANs

Zhan Liu; Texas A&M University
Sensor Network Key Management Time-Stamp-Counter Impact on Network Security

Stefan A. Robila; Montclair State University
Neo-Approaches for Feature Extraction in Hyperspectral Imagery

Anu Singh, C. R. Ramakrishnan, Scott A. Smolka; SUNY Stony Brook
Modeling the AODV Routing Protocol in the Omega Calculus

Wei Su and John Kosinski; US Army, and Ming Yu; SUNY Binghamton
Dual-Use of Modulation Classification Techniques for Digital Communication

Ibrahim Tekin, Mehmet Kaynak, and Yasar Gurbuz; Sabanci University
Low Noise Amplifier Design Using 0.35 μ m SiGe BiCMOS Technology for WLAN/WiMax Applications

Roman Yampolsky; University of Buffalo, Dima Novikov and Leon Reznik Rochester Institute of Technology
Artificial Intelligence Approaches for Intrusion Detection



IEEE

IEEE LONG ISLAND SECTION and
IEEE REGION 1 present

LISAT2006

The second annual conference on
Long Island Systems, Applications, and Technology

Friday, May 5, 2006 9am – 5pm

in cooperation with the

**INSTITUTE FOR RESEARCH & TECHNOLOGY TRANSFER
LUPTON HALL**

Farmingdale State University of New York



**Farmingdale
State University
OF NEW YORK**

The IEEE Long Island Section, in cooperation with its Technical Society Chapters and IEEE Region 1, will be holding the **2006 Long Island Systems, Applications, and Technology Conference (LISAT2006)** on Friday, May 5, 2006, in Lupton Hall's **Institute for Research & Technology Transfer (IRTT)**, Farmingdale State University, 2350 Broadhollow Road, Farmingdale, New York.

This second annual LISAT Conference will feature presentations in two parallel tracks that highlight new and interesting work on a variety of electronic systems, technologies, and applications. The Conference focuses on LI development, but also includes several international papers, and covers topics in state-of-the-art communications, RF technology, electromagnetic compatibility, and advanced software techniques, and a cutting edge paper on hurricane suppression. The lunch period program includes a tour of the research being undertaken in Farmingdale State's Institute for Research & Technology Transfer will be organized by Dr. Hazem Tawfik or Irwin Weitman's presentation "How to Select a Consultant."

LISAT2006 Technical Program

N. Amiri and K. Fomoraghi; Tarbiat Modares U.: A Compact Dual-Polarized Microstrip Array Antenna for GSM900 Base Station • B. Beheshti; NYIT: Performance Analysis of Software Implementation of a 3GPP Compliant Turbo Decoder • P. Bishop; Tektronix: Characterizing PLLs Using Spectrum Analyzers Station • P. Carter Jr: Voltage and Current Transferring Properties of Ninety Degree Phase Shift Networks which are Independent of Load Impedance or Admittance and Their Application to Various RF Circuits and Antenna Systems Station • J. Colotti; Telephonics: EMC Design Fundamentals • J. D'Souza and P. Stripe; NYIT: A Low Cost Highly Reliable Virtual Network Storage System • G. Fenical; Laird Technologies: Neo-Developments in Shielding Materials • A. Gundel; Telephonics: High Performance Low Phase Noise PLL Clock Synthesizer with LVDS Outputs • V. Kulkarni; U. of Massachusetts: Control of Electromechanical Coupling in Stacked Crystal Filters • S. Kumar and K. Kambhatia; Clarkson U.: MTSR: A Multi-Hop Transport Layer Scheme for End-to-End Reliability in Heterogeneous WSN • W. Kwong; Hofstra University, I. Glesk, V. Baby, C. Bres, and P. Prucnal; Princeton U.: Design of an Asynchronous Wavelength-Time Optical CDMA Testbed • R. LaRosa: Hurricane Suppression by Sea Surface Cooling • E. Maszade, M. Keskinov, and O. Gurbuz; Sabanci U.: Proportional Time Sharing with Frame Size Adaptation of MB-OFDM Based UWB PANs • Z. Liu; Texas A&M U.: Sensor Network Key Management Time-Stamp-Counter Impact on Network Security • S. Robila; Montclair State U.: Neo-Approaches for Feature Extraction in Hyperspectral Imagery • R. Pirich, P. Anumolu, and D. Schefer; Northrop Grumman Integrated Systems: Curved Surface Diffraction Phenomenology, Modeling & Characterization • A. Singh, C. Ramakrishnan, S. Smolka; SUNY Stony Brook: Modeling the AODV Routing Protocol in the Omega Calculus • W. Su and J. Kosinski; US Army, and M. Yu; SUNY Binghamton: Dual-Use of Modulation Classification Techniques for Digital Communication • I. Tekin, M. Kaynak, and Y. Gurbuz; Sabanci U.: Low Noise Amplifier Design Using 0.35 μm SiGe BiCMOS Technology for WLAN/WiMax Applications • R. Yampolsky; U. of Buffalo, D. Nivikov and L. Reznik; RIT: Artificial Intelligence Approaches for Intrusion Detection

Conference Registration *

(Includes lunch, breaks, and Proceedings)

Please send name, email & address with check made out to
IEEE Long Island Section; Dr. Charles Rubenstein, Conference
Chair, 90 County Line Road, Massapequa, NY 11758
Answering Machine/Fax: +1 516 598-4619

Member type	Until April 1	After April 1
IEEE Members	\$ 125	\$150
Non-members	\$175	\$200
IEEE Student & Life	\$ 50	\$ 75

IEEE is an Authorized CEU
Provider of the International
Association for Continuing
Education and Training
(IACET) IACET Provider #
1255 -- NY State CE
Provider # 100998



<http://www.ieee.li/lisat>

*Up to 0.6 CEU Credits Available (add \$15)

LISAT2006 Organizing Committee

CONFERENCE CHAIR: Charles Rubenstein, Pratt Institute <c.rubenstein@ieee.org> **CONFERENCE VICE CHAIR:** Babak Beheshti, NYIT

HONORARY Co-CHAIRS: Keven J. McSweeney - President, Telephonics Command System Division and
Jonathan Gibraltar - President, Farmingdale State University

TECHNICAL Co-CHAIRS: Jesse Taub, Independent Consultant; Dave Mesecher, Northrop Grumman AEW & EW Systems

FACILITIES CHAIR: John Fiorillo, Farmingdale State **SECRETARY** Lucyna Plaskota **PUBLICITY CHAIR:** Mark Sadick, Sag Harbor Ind, Inc.

EXHIBITS CHAIR: Fred Kruger, Independent Consultant **CEUs:** Irwin Weitman, Independent Consultant **TREASURER:** Brian Quinn, Verizon

CONFERENCE SPONSOR Executive Officers: Region 1 Director Barry Shoop; Long Island Section Chair David Wolff, BAE

NEWS

School of Engineering and Technology



Earn your Master's of Science in:

- Electrical and Computer Engineering
- Computer Science
- Energy Management
- Environmental Technology
- Information, Network and Computer Security*

Programs offered in the evenings to accommodate working professionals
Convenient locations in Old Westbury and Manhattan
Thesis optional

* The laboratory facilities are supported by U.S. Department of Defense, Office of Naval Research

Contact us at 1.800.345.NYIT or visit www.nyit.edu

NYIT

NEW YORK INSTITUTE OF TECHNOLOGY

LISAT 2006
May 5, 2006
Institute for Research & Technology Transfer
Lupton Hall
Farmingdale State University of New York

Registration Form

Make checks payable to "IEEE Long Island Section". Send form to:
Dr. Charles Rubenstein, LISAT Conference Chair
90 County Line Road, Massapequa, NY 11758

Registration Fees:

Member Type	Until April 1	After April 1
IEEE Members	\$125	\$150
Non-Members	\$175	\$200
IEEE Student & Life Members	\$50	\$75
(up to 0.6) CEU Credits Fee	\$15	\$20

Name: _____

Company: _____

Company Address: _____

City and Zip: _____

Business phone: _____ Business Fax: _____

=====

Home Address: _____

City and Zip: _____

Home phone: _____

email: _____

IEEE or NSPE Member #: _____ Grade: _____

Amount enclosed: _____

IEEE CONET Announcement

On **April 5, 2006 at 7 PM**, The IEEE Consultants Network of Long Island Presents: "CPR", by Mr. Norman Weingart, Syosset, NY.

More Details Available on our website: <http://licn.org/>.

Time: 7 PM.

Location: Briarcliffe College, The Great Room
1055 Stewart Avenue
Bethpage, NY 11714

Program Outline:

A founder of Communications Specialties, Inc. a firm that designs and manufactures Fiber Optic transmission systems for video, audio and data as well as Audio Visual products such as Scan Converters, Video Scalers, Distribution Amplifiers, etc., Mr. Weingart retired in 2001 and attended a CPR course at Syosset High School where he became familiar with Automatic External Defibrillators (AEDs).

Realizing that an AED would benefit his synagogue, he requested a budget to purchase one and train various members in its use.

In order to maintain the proficiency of our members, he attended North Shore/LIC's Professional Training Department where he received training and became certified as an American Heart Association *Heartsaver AED* instructor.

Mr. Weingart now teaches various CPR and Heartsaver AED courses as a volunteer.

Program Coordinator: John Dunn

Registration: None required. For further information, contact the coordinator by e-mail at ambertec@ieee.org or by telephone at 516-378-2149.

The presentations are wholly the responsibility of the IEEE Long Island Section and the speakers. The meeting admission is free and open to the public.

STILL TIME TO ATTEND! Visit www.ieee.li or contact **Bill DeAgro, 516-346-0016**
for the

IEEE LONG ISLAND SECTION AWARD BANQUET

Friday, April 7 @ 6 pm

Featuring **Robert Klein, VP, Northrop Grumman Integrated Systems as Keynote Speaker**

The IEEE Long Island Section Computer Society
presents a seminar titled:

Architectural Techniques for Interoperability and Coexistence

Tuesday, April 18 2006 6PM



WHO SHOULD ATTEND? Persons who are interested in interoperable software design and implementation. The seminar is free and open to all.

WHAT ARE THE KEY BENEFITS? Explore how successful architectures have achieved longevity without major incompatible changes.

**Speaker Robert Gezelter,
Software, Consultant**

HOW TO REGISTER: If you wish to attend, please register via internet in the calendar section of <http://www.ieee.li/calendar.htm>.

Abstract:

We will examine how successful architectures have achieved longevity without major incompatible changes. In the end analysis, success for architecture is measured by its ability to assimilate changes in mission, implementation, interconnection, and scope without the need for incompatible changes. Put succinctly, 20 years into an architecture, success is measured by the ability of systems implemented on Day One to interoperate unchanged with systems implemented on Day 20369.

Location and Time:

6:00 to 8:30 PM Tuesday April 18, 2006 located at Telephonics Corporation on Route 110 in Farmingdale, New York. Pizza and soda will be provided. The seminar is free and open to all. If you wish to attend, please register via internet in the calendar section of <http://www.ieee.li/calendar.htm>. You may contact the coordinator Daniel Rogers by email at drogers@ieee.org. The seminar is wholly the responsibility of IEEE Long Island Section and the speaker.

The Long Island Chapter of the IEEE Circuits and Systems (CAS) Society
is presenting a lecture titled:

Passive Network Synthesis: Camelot in our Grasp **Speaker: Dr. Richard Saeks, Accurate Automation Corp.** **Monday May 1, 2006 at 6:30pm**

(This seminar is free and all are invited. Refreshments will be served.)

Who Should Attend?

Engineers interested in circuits and systems theory and design.

Abstract:

If Engineering is the "Art of Design," then the ultimate goal of the design engineer is to automate the design process. Indeed, in the first half of the 20th Century the circuit designers led the engineering world by automating the design of telephone filters and other passive circuits via. passive network synthesis. Although this technology became obsolete in the second half of the century by advances in solid state and computing technology, it set the stage for future developments in circuits and systems design automation. In this seminar the speaker will review some of the progress towards this goal, and the potential for, fully automating the design of modern circuits and systems.

Speaker Bio:

Dr. Richard Saeks is Vice President Engineering and Chief Technical Officer of the Accurate Automation Corporation, Chattanooga TN. Before joining Accurate he was Dean of Engineering and Motorola Professor at the Illinois Institute of Technology, Chair of Electrical Engineering and Computer Science at Arizona State University, and a faculty member at Texas Tech University and the University of Notre Dame. Dr. Saeks received the B.S., M.S., and Ph.D. degrees, all in Electrical Engineering, from Northwestern University, Colorado State University, and Cornell University, respectively. He is a Fellow of the IEEE and of the AIAA, and a Past President of the IEEE Systems Man and Cybernetics Society.

Location:

Telebyte, Inc
270 Pulaski Road
Greenlawn, NY 11740
(631)423-3232 ext 469
awilliams@telebytebroadband.com

For Driving Directions:

http://www.telebyteusa.com/driving_directions.htm

Note: We are just west of BAE on the North side of Pulaski Road

Registration is required and is available on-line. Please visit the calendar page of the IEEE Long Island Website www.IEEE.LI click on the registration link and fill out the form.



IEEE

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

Is Proud to Announce the

IEEE LONG ISLAND SECTION ANNUAL AWARDS BANQUET

Friday April 7, 2006 6PM

Huntington Hilton, Melville, NY

Please help us recognize the achievements of the following members, and their contributions to the profession and the Long Island Section:

Richard Kumpfbeck, BAE Systems
Long Island Section Harold Wheeler Award

Daniel Rogers, Telephonics Corporation
Long Island Section Alex Gruenwald Award

Aleksey Bolotnikov, Brookhaven National Labs
Long Island Section Charles Hirsch Award

David Hernandez, Northrop Grumman Corp.
Long Island Section Outstanding Young Engineer Award

Serge Luryi & K. Wendy Tang, SUNY Stony Brook,
Long Island Section Athanasios Papoulis Award

Charles Vozzo, Telephonics Corporation
Region 1 Award for Electrical Engineering Management

Richard Krabak, Telephonics Corporation
Region 1 Award for New Technical Concepts in Electrical Engineering

Thomas Robertazzi, SUNY Stony Brook
Fellow Award

Peter Djuric, SUNY Stony Brook
Fellow Award

Peter Eckstein, Northrop Grumman Corp.
Enhancement of IEEE in Industry and Community Service

Charles P. Rubenstein, Pratt Institute
Enhancement of IEEE in Industry and Community Service

See <http://ieee.li> (or contact **Bill DeAgro**)

FEATURING KEYNOTE ADDRESS BY

Robert W. Klein

Vice President

Engineering, Logistics and Technology
Airborne Early Warning and Electronic Warfare Systems
Integrated Systems, Northrop Grumman Corporation

**"New Efforts at Northrop Grumman &
Workforce Challenges for the 21st
Century on Long Island"**



Bob Klein is responsible for over 2000 engineers located in New York, Maryland, Florida and California supporting airborne early warning, electronic warfare, aircraft product support and services, decision support and targeting, maritime systems integration, homeland security

and advanced capabilities development integrated product teams. These include the Hawkeye 2000, Advanced Hawkeye, EA-6B, EA-18, F-14, A-10, C-2, Raindrop Precision Targeting and Littoral Combat Ship support. As EL&T VP he has increased the technical staff from 1250 to 2100 personnel; implemented new tools such as the Virtual Design Environment, Software Productivity Initiatives, Knowledge Management Portal, Future Support System Environment and CMMi certification; performed collaborative design work in New York for the F-35 Joint Strike Fighter, won the \$32M Structurally Integrated Prognostics System CRAD and organized the Technology Day and Emerging Tech Expo with Senator Clinton and NYS companies. Bob serves on a number of professional organizations including Chairman of the Technical Operations Council of the Aerospace Industries Association, Vice Chairman of LIFT, Executive VP of LIMSAT, Long Island Technology Hall of Fame Committee; and Advisory Committees for Polytechnic University, SUNY Stony Brook, Stevens Institute of Technology and MIT.

30 YEARS AGO Rod Lowman, Historian

The outstanding success of two programs in April of 1977 demonstrated the advantage of multi-society sponsorship. Meeting planners spend a lot of time and effort in arranging good meetings and other society's members should have the opportunity to enjoy these efforts also.

For the section meeting a panel of four outstanding leaders discussed the thesis "*Can Professional Societies provide an effective alternative to Unions?*" Sponsored by the AIAA, the L.I. and N.Y sections of the IEEE, and the NSPE, the panel consisted of Geoffrey Potter, Administrator for Member Services, AIAA, Sanford Lenz, Professor of Labor Relations at Cornell U., Harold Ammond, Executive Director of the Engineers Union at RCA, Camden, John Guarrara, Sr. Past Pres. of the IEEE, and was moderated by Milton Alpern NSPE Past President. After a careful analysis, the panel concluded that in areas where industry has a strong community interest and professional societies are cooperative, professional societies can provide a good alternative. Where industry is less community minded professional societies may find it more difficult.

The other program covered the background of Air Force Programs and the Future of Remotely Piloted Vehicles. It has taken 30 years for RPV's to become a potent weapon but even then we tried to alert industry to its great potential. To do so we marshaled all the potential societies as sponsors including the IEEE, the Elmer A. Sperry chapter of the National Association of Remotely Piloted Vehicles, the AIAA and the Metropolitan Club of the Association of Old Crows. We filled the Kings Grant Motel Dining Room with this dinner meeting featuring "Red" Smith, Deputy Program Manager of Advanced RPV's at Northrup, Formerly Manager of the BGM 34 Program at the RPV SPO at Wright Field and a long time expert in the RPV field. As an added attraction he showed movies of several RPV Programs

These multi-society sponsored programs can enhance the cross fertilization of ideas, provide a real service to members of other societies, impress industry with our community interest, convince government that we are moving together to bolster the government's and the popular support of science. I think we should have more of them.



VOL. 56, No. 4

(USPS 450-540)

For
April
2006:

PERIODICAL MAIL
POSTAGE PAID AT N.Y., N.Y.



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

IEEE *Pulse*
P.O. Box 1331
Piscataway, NJ 08855-1331