

The *Pulse* of Long Island



April 1, 2005 - Vol. 55 No. 4

Chairperson's Message

*By Daniel Rogers
drogers@ieee.org*



It is April, and I want to again herald the 2005 IEEE Long Island Section Awards Ceremony to be held on April 15th (see the advertisement in this issue of the Pulse).

Also worthy of your consideration is the Long Island Systems and Technology Conference; please see the detailed information presented within this issue. We'd like to have as much of the section support this premier event as possible!

I received a thought provoking email from the IEEE-USA this month. To summarize, the U.S. Department of Labor's Bureau of Labor Statistics (BLS) has indicated that the number of employed U.S. technical workers has fallen by 221,000 in six major computer and engineering job classifications between 2000 and 2004. In the computer area, there was a silver lining in that a large decrease in Computer Programmers (24%) was offset by increases in computer and information system managers (up 48 % in this category). It could be assumed that this increase is to manage the outsourced programmers. Software Engineers experienced a 10% growth. One very troubling statistic is that employed electrical and electronics engineers shrunk by 101,000, from 444,000 in 2000 to 343,000 last year, a decrease of nearly 23 percent. Although a complete picture of the labor picture can only be assessed by looking at other labor categories than those discussed above, after my analysis I was left with a very mixed message.

I am sure that the foreign competition in engineering will become a larger and larger consideration in our profession. I am also not convinced that the future is lost for US Engineers. If America can continue to lead in innovation and vision, we can continue to be the premier engineering nation on the planet. Wise policies by our corporations and government will assist us in pursuing this goal, provided we engineers give them our studied insights into the issues.

Someone once asked Andy Rooney of CBS why he didn't retire and make room for someone younger, and he said that there is a lot of work to do out there that isn't getting done yet, let the younger man do that. I think that is also true of the engineering field, there is plenty of work to be done, more engineers from other countries can make our lives better as long as we have the vision to keep everyone moving. There is no shortage of things to be done. Look around you. As higher and higher percentages of the human race become well educated and integrated in the global economy I think we'll see our common civilization improve. We need to focus the technological improvements on such areas as energy generation, energy efficiency, pollution control, and intercommunication.

(Continued on page 2)

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!

MEETING NOTICE

On the **First Wednesday of each month** at 7 PM, the IEEE Consultants Network of Long Island will Meet.

The program will be held at Briarcliffe College, 1055 Stewart Avenue, Bethpage, NY.

Admission is free (no charge). No pre-registration is required.

For last minute announcements and updates visit:

www.consult-li.com

Chair's Message

(Continued from page 1)

I just got back from Orlando, and with my family visited the Experimental Prototype City of Tomorrow (EPCOT). Disney's vision of a utopian city on the hill based upon advanced technology has never been truly realized. Beyond the monorail and geodesic dome the major pillar of EPCOT was a basic optimism about engineering and technology being able to provide answers to all the world's problems. In hindsight, we realize that this vision was naïve but it was certainly pure, honorable and vibrant. I don't think Disney was wrong, but he left out the required advances in human ethics, sociology and world government that will have to accompany the technological advances propelling us into the future. Even though he did leave these out, we shouldn't forget that engineering has a major role to play.

I remember as a boy seeing futuristic shows about flying cars and robots to mow the lawn and instant transportation from Long Island to Orlando or Yellowstone Park. I want my flying car! Everyone, get to work. America can continue to lead the way.

HARDWARE/SOFTWARE DISCOUNTS AVAILABLE TO IEEE MEMBERS

IEEE members in the United States, United Kingdom and Canada are eligible for discounts on hardware and software purchases through Insight Inc. as part of the IEEE Financial Advantage Program. Discounts apply to more than 250,000 products from IBM, Apple, Microsoft, Hewlett Packard, Toshiba and other well-known brands. To start browsing, visit <http://www.insight.com/ieee>, click on your country's flag and set up an account.

Now through 31 March, IEEE members who register for an Insight account will automatically be entered in a sweepstakes for a chance to win a Hewlett Packard iPAQ Pocket PC. No purchase is necessary to win. There will be one winner each from the United States, United Kingdom and Canada.

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Chair. Daniel Rogers
1st Vice Chair . . . David Wolff
2nd Vice Chair. . . Ted Pappas
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Address All Correspondence to:

PULSE EDITOR

Babak Beheshti
101 Caffrey Avenue
Bethpage, NY 11714-1435
Phone: 516-939-0249
Email: b.beheshti@ieee.org

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phone: (800) 678-IEEE
PO BOX 1331
PISCATAWAY NJ 08855-1331

PULSE Deadlines

For May 2005 4-5-05
For June 2005 5-5-05

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
P.O. Box 931
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Half Page.....\$430.00 per issue
1/3 Page \$280.00 per issue
Business Card.....\$95.00 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

April 4&6, 2005 - "Advanced Digital Signal Processing Methods and Programming Concepts" seminar, Babak Beheshti of NYIT. Please see announcement in this issue. For information contact Babak Beheshti at b.beheshti@ieee.org or 516-686-7437.

April 6, 2005 - "Patents, Copyrights and Trademarks" by Mr. Gerald Bodner of Bodner & O'Rourke, LLP, Melville, NY. A lecture 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 9-10, 2005 - Region 1 Student Conference, SUNY Buffalo. For details visit: <http://wings.buffalo.edu/sa/ieee>

April 12, 2005 - "Ferrite Cores For EMI Suppression" Paul Zdanowicz, Fair-Rite Corporation. A lecture, sponsored by the IEEE EMC Society, will be held at BAE Systems Inc, 450 Pulaski Road , NY. Registration and refreshments at 6 PM and the lecture begins at 6:30 PM. The lecture is open to the public, but registration is required- see the announcement in this issue for details. For additional info, contact the lecture coordinator, Sandy Mazzola at mazzolas@ieee.org at 631-262-8367.

April 15, 2005 - IEEE Long Island Section 2004 Awards Banquet, Huntington Hilton, 6:00 PM to 10:00 PM. Visit our web site for details.

April 25, 2005 - 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 Daniel Rogers for reserving a space in the meeting (drogers@ieee.org).

May 4, 2005 - LI Consultant's Network at 7:00 PM at Briarcliffe College. For more details see announcement in this issue.

May 6, 2005 - LISAT '05, the first annual Long Island Systems, Applications and Technology Conference 8:30am - 5:00 PM, at SUNY College of Technology at Farmingdale in Farmingdale, NY. This first conference will feature invitation-only presentations across all IEEE Society fields of interest focusing on activities developed here on Long Island and an S-PAC/M-PAC Student Conference. See the full page announcement in this issue of the Pulse for further details

May 10, 2005 - "Naval Air Warfare Center Electromagnetic Effects (E³) Division Capabilities", Kurt Sebacher Chief Engineer Integrated Combat Environments Division, NAVAIR Patuxent River , Maryland. 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- see the announcement in this issue for details. For additional info, contact the lecture coordinator, Santo Mazzola at mazzolas@ieee.org or at 631-262-8367.

May 9 & 11, 2005 - "Web Site Design without HTML Workshop Using Macromedia Studio MX2004™", Babak Beheshti of NYIT. Please see full page announcement in this issue. For information contact Babak Beheshti at b.beheshti@ieee.org or 516-686-7437. OPEN and FREE TO ALL IEEE members- Please contact Daniel Rogers for reserving a space in the meeting (drogers@ieee.org).

PUBLISHER'S STATEMENT

The IEEE PULSE is the official news publication of the Long Island Section of The Institute of Electrical and Electronics Engineers, Inc. The Long Island Section is comprised of Nassau and Suffolk counties. The publication reports on events and activities of interest to the general membership composed of electrical and electronics engineers and computer scientists, presents topical feature material relevant to the engineering profession, and carries the monthly IEEE society chapter calendar of events as a service to its readers.

CIRCULATION

The IEEE PULSE is distributed to all IEEE members in the Long Island Section.

ISSUE AND CLOSING DATES

The IEEE PULSE is published monthly except July and August. Advertising order deadline is the 1st of the month preceding issue date. Camera ready material is due on the 5th of the month preceding issue date.

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LISAT2005

Long Island Systems, Applications and Technology Conference

The IEEE Long Island Section and IEEE Region 1 present the first annual
2005 Long Island Systems, Applications and Technology Conference
Friday, May 6, 2005 at the

Institute for Research and Technology Transfer (IRTT)
Lupton Hall - Farmingdale State University of New York
2350 Broadhollow Road - Farmingdale, NY 11735

The IEEE Long Island Section in cooperation with its technical society Chapters and IEEE Region 1 will be holding the **2005 Long Island Systems, Applications and Technology Conference (LISAT2005)** on Friday, May 6, 2005 in Prof. Hazem Tawfik's Institute for Research and Technology Transfer at Farmingdale State University of New York.

This Conference, the first of what is intended to be an annual event, will feature sixteen invitation-only presentations in two parallel tracks that highlight new and interesting work on a variety of electronic systems, technologies and applications most of which are Long Island based.

LISAT2005 will highlight the systems approach to space based synthetic aperture radars, the current status and future of satellite communications, advances in computer networking and new software architectures, Brookhaven National Laboratory's work on detectors for Homeland Security, techniques for minimizing electromagnetic interference, and amplifier, antenna and Fuel Cell design criteria and techniques.

There will also be a full-day IEEE Student Conference track featuring graduate and undergraduate student paper presentations as well as a presentation and tour of the research being undertaken at the Institute for Research and Technology Transfer at SUNY Farmingdale.

Conference Registration <i>(fee includes lunch, breaks, and Proceedings in print and CD-ROM formats)</i>		
Member type	Advanced Registration (<i>until April 20</i>)	Regular Registration (<i>after April 20</i>)
IEEE Members	\$95	\$125
Non-members	\$125	\$160
IEEE Student & Life Members	\$50	\$75

LISAT2005 - Friday, May 6, 2005

<http://www.ewh.ieee.org/reg/1/lisat/>

Please send your name, email and address with checks made out to the "IEEE Long Island Section" to:

Dr. Charles Rubenstein, Conference Chair - 90 County Line Road - Massapequa, New York 11758
Answering Machine/Fax: +1 516 598-4619

Conference Chair

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Honorary Co-Chairs

Eduardo Palacio (EDO Electronic Systems)

Hazem Tawfik (Institute for Research and Technology Transfer, Farmingdale SUNY)

All information listed on this website is correct at the time of publication (2/22/05).
The organizer reserves the right to change the program without prior notice. This material is Copyright ©IEEE 2005.



Long Island Systems, Applications and Technology Conference

The IEEE Long Island Section's Annual Conference

Please reply to: Charles Rubenstein

LISAT2005

Organizing Committee:

GENERAL CHAIR:

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<c.rubenstein@ieee.org>

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Hazem Tawfik, IRTT - SUNY Farmingdale

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LI Section Chair Daniel Rogers, Telephonics

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Gregory Hovagim, SUNY Stony Brook

WEBMASTER:

James Colotti, Telephonics

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Dr. Arlene W. Zhang

Web Site URL:

<http://www.ieee.org/r/1/lisat/>

LISAT2005 TECHNICAL PROGRAM

Alphabetic listing as of March 2, 2005

Thomas Cataldo, DSARS
A Novel Space Time Adaptive Processing Radar System

James Colotti, Telephonics
Analog, RF and EMC Considerations in Printed Wiring Designs

Carl Czajkowski, Brookhaven National Laboratory
Homeland Security Support and Cooperation for NYC

Samir Das, SUNY Stony Brook
Use of Diversity in Wireless Multiloop Networks

Saj Durrani, IEEE Distinguished Lecturer
Satellite Communications: Status and Trends

Dennis Frailey, Raytheon
Integrated Project Management

James Karanik, Northrop Grumman AEW & EW Systems
Affordable Conformal Antennas

Vincent Lauria, EDO Electronic Systems
STALO Synthesizer

Richard J. Mohr, R. J. Mohr Assoc., and Santo Mazzola, BAE
Getting your Product through Electromagnetic Compatibility (EMC) Tests

Dominick Paniscotti, BAE Systems
Software Defined Radio for the Joint Tactical Radio System (JTRS)

Richard S. Pierro, Technology Service Corp.
Space-Based Radar: Overview, History and Recent Developments

Ronald Pirich, Dave Hernandez, and Praveen Anumolu,
Northrop Grumman AEW & EW Systems
Passive Materials for Electromagnetic Interference Mitigation

Hazem Tawfik, IRTT - SUNY Farmingdale
Fuel Cell Research

M. Upmaka, Agilent Technologies
Load Pull Techniques for RF Power Amplifier Design

Peter Vanier, Brookhaven National Laboratory
Advanced Nuclear Detection Technologies and Systems

Graduate and Undergraduate students, Prof. Tawfik, and Region 1 Student Activities Chair Babak Beheshti (New York Institute of Technology, A Study of the Technology Migration Path of the Cellular Wireless Industry from 3G to 3.5G And Beyond), will be presenting their work in a separate Student Track



IEEE Long Island Section and the IEEE Computer Society Present
HTML Primer and Web Site Design Workshop
Using Macromedia Studio MX2004™
 May 9, 10, 11 - 2005, 6:00—9:00 PM

Contents

1. (session 1) HTML & Web Page Construction using Wordpad
 - Introduction Why do we need HTML? HTML, XHTML and XML what are they? Structuring your web pages into a web site Using Wordpad to create and modify simple HTML pages
 - HTML File Structure Tags (html, title, body)
 - Document Heading & Text Control Tags
 - Tags for Links & Images (anchor and img)
 - Layout Element Tags (pre, blockquote, p, br, hr)
 - List Element Tags (li, ol, ul)
 - Text Formatting using Table Element Tags (table, td, tr)
 - About Form Element Tags (radio, input)
2. (session 2) Developing Web Content
 - Developing Content: A Four-Step Process, Choosing and Organizing Content
3. Creating Basic Web Pages
 - Working with Text, Working with Images
 - Working with Links, Working with Tables
3. Creating and Using Dreamweaver Sites
 - Defining a Site in Dreamweaver
 - Setting Up a Remote Connection & Publishing Your Site
4. (session 3) Punching Up Your Pages with Forms and Frames
 - Incorporating Forms into Web Pages
 - Structuring Pages with Frames

Payment (if paid by)	IEEE Member	Non-IEEE Member
April 20, 2005	\$200	\$250
May 1, 2005	\$250	\$300

Registration Form
HTML Primer & Web Design Workshop Using Macromedia Studio MX2004™
May 2005

Make checks payable to "IEEE Long Island Section". Send form to Babak Beheshti, 101 Caffrey Avenue, Bethpage, NY 11714-1435

Name: _____

Address: _____

City and Zip: _____

Hphone: _____ Bphone: _____

email: _____

Company: _____

Member #: _____ Grade: _____

Amount enclosed: \$ _____

The IEEE Consultants Network of Long Island Presents: "Patents, Copyrights and Trademarks"

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

Time: 7 PM.
Location: Briarcliffe College, The Great Room
 1055 Stewart Avenue
 Bethpage, NY 11714

Lecture Outline:

Patents

Definition of Patent, Basis for Patent Rights, Patent Term, Rights Granted by Patent, "Patent Pending", Comparison: Patentability, Infringement, Marketability, Examples of Patents, Statutory Bars - Need to File Patent Applications Timely, Foreign Filing, Patent Prosecution - What happens at Patent Office after an application is filed, Marking Products with Patent Number.

Trademarks

Definition of Trademark, Choosing a Trademark, Registration, Foreign Filing, Proper Use of Trademark Notice.

Copyrights

Definition of Copyright, Registration of Copyright, Copyright Notice, Example of Protecting a Product with Patents, Trademarks and Copyrights, Trade Secrets

Lecture 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-

Professional Activities Report for January 2005

By: Irwin Weitman, P.E., PACE Chairman

IEEE-USA SUPPORTS REVERSE ENGINEERING IN U.S. COURT OF APPEALS BRIEF

IEEE-USA filed a "friend-of-the-court" brief on 24 Jan., in the U.S. Court of Appeals, in support of reverse engineering for interoperability. The brief seeks a reversal in the "Blizzard Entertainment v. Internet Gateway" case, in which the Court of Appeals ruled that by opening the shrink wrap of a software package, or clicking on a button during installation, the end user gives up fair use rights, including reverse engineering.

For more details, read the news release at: <http://www.ieeeusa.org/communications/releases/2005/020905pr-2.asp>

IEEE-USA RECOMMENDS PROLONGING THE LIFE OF HUBBLE TELESCOPE

In a statement to the House Science Committee on 2 Feb., IEEE-USA said NASA should explore all possible avenues toward prolonging the useful life of the Hubble Space Telescope.

See the news release at: <http://www.ieeeusa.org/communications/releases/2005/020205pr.asp>

This is a special Notice to Licensed Professional Engineers:

I am sure you are aware that beginning this year P.E.s are required to demonstrate that they have acquired 36 Professional Development Hours (PDH) during the preceding 3 years, at the renewal time of their P.E. Registration. The PACE of the Long Island Section is in the process of identify P.E.s who are interested in taking courses and presenting courses to our members who need these PDHs. We have several individuals who are able to present seminars. The structure for awarding the CEUs/PDHs is available to us from IEEE Headquarters in Piscataway, NJ. I will act as liaison and contact person to expedite the procedure. If you have an interest please contact me by e-mail at; i.weitman@ieee.org

We have been approved to award CEU credits for two seminars. For the month of May we will have a two hour short course (2 PDH=0.2 CEU) titled "Linux Self Booting-Self Contained CD-ROMs". This will be presented on May 4, 2005 during the monthly meeting of the IEEE Consultants Network of L.I. (Free). Non-members of LICN attending are required to register. Participants who wish to receive CEUs will be required to pay a \$15.00 fee to cover IEEE costs relating to registration of the CEUs.

The second short course is 9 hours on three evenings on June 7, 9, 14, 2005 titled, "Printed Circuit Board Design and EMI Solutions. Venue, cost, etc will appear in PULSE.

To all IEEE members: The above Continuing Engineering Courses/seminars will be open to all IEEE members. Some of these presentations will take place at the regular IEEE Consultants Network meetings (the first Wednesday of each month) and others of longer than 2 hours will be scheduled at other times and other venues. The longer courses will have a nominal charge similar to previous IEEE classes. As soon as other subjects and instructors become available, I will announce them in the PULSE and suggest a schedule.

Consultants Network:

The March Consultants Network was a joint meeting with the IEEE Electromagnetics Compatibility Society, with two speakers:
Topic 1: "Human Hearing, An Engineering Viewpoint" presented by Mr. Martin Kanner of KEMCO-Power Controls, Plainview, NY

Topic 2: "PWB Design Using Hyperlynx" presented by Mr. Sandy Mazzola of BAE Systems, Greenlawn, NY.. We had more than 50 participants and two excellent presentations by a member of each group. The meeting didn't breakup until 11:00 PM.

The program scheduled for April 6, 2005 - "Patents, Copyrights and Trademarks" by Mr. Gerald Bodner of Bodner & O'Rourke, LLP, Melville, NY.

You may contact me with questions or comments at i.weitman@ieee.org
or (631)266-2651.

Irwin Weitman, P.E.

The Long Island IEEE Professional Activities Committee for Engineers (PACE)

Presents a Tutorial Course on:

Printed Circuit Board Design and EMI Solutions

Conducted by

Irwin Weitman, P.E.

Sponsored in part by the Long Island Section of IEEE

Overview

The IEEE Long Island Section PACE committee is presenting a tutorial course for the Practical design of RF, Analog, and Digital PC Boards with the emphasis on avoiding EMI problems.



Who Should Attend

Engineers who design or supervise the design of printed circuit boards. This course is equally important for recently graduated engineers because it shows them real world examples of problems they may face and learn how to avoid them. Professional Engineers who now require CEU/PDH credits for license renewal are prime candidates.

CEU/PDH Credit Hours

Continuing Education Units (0.9 CEUs will be awarded) this is equivalent to 9 Professional Development Hours (9 PDHs) will be awarded to participants that request them.

Key Benefits

Now that digital circuits, microprocessors and integrated circuits have moved well beyond 100Mhz digital engineers computer engineers find themselves in the analog world. They find that printed circuit traces are distributed components and antennas that can cause unintended oscillation that radiate RF pulses. There are no fewer design rules than before but there are many more related to electromagnetic radiation and susceptibility.

Content

The course is comprised of 3 sessions of 3 hours each.
Basic: Technical background review and some new ideas including many tips they don't teach in college.
Intermediate: Preparing to start a layout. Ground rules for PC layout. Problem areas and principles of how to deal with them.
Advanced: More rules for more complex problems and how to resolve them.
Many tips directed toward practical design for effective low cost and low EMI susceptibility PC design

Instructor

Irwin Weitman, P.E. is the PACE Chairman of the LI Section of IEEE, and has served as Chairman of the IEEE LI Consultants Network several terms of office and as chairman of the Alliance of IEEE Consultants' Networks. He is a recognized speaker for the IEEE "Student - Professional Awareness Conference" (S-PAC). He has been in private consulting practice since 1985 and worked for many companies prior to that time. His areas of experience are in analog, RF, and digital circuit design. Irwin has a BSEE from Columbia, MSEE from Polytechnic and is a licensed P.E. since 1970.

Location and Times

Session 1: June 7, 2005 from 6:00 to 9 PM.
Session 2: June 9, 2005 from 6:00 to 9 PM.
Session 3: June 14, 2005 from 6:00 to 9 PM.

Location is at Polytechnic Institute, 105 Maxess Road, Huntington, NY 11747. see MAP: http://www.weitman.org/polytech_map.jpg

For further information contact Irwin Weitman at (631)266-2651 or at i.weitman@ieee.org.

Registration Fees

Table with 3 columns: Registration Period, Non-Member, Member. Rows: By May 15, After May 15.

Registration Form Leadership Skills Workshop, Nov, 2003. Make checks payable to "IEEE Long Island Section". Submit check and registration form to Irwin Weitman, 196 Cedrus Avenue, East Northport, NY 11731. Includes fields for name, address, phone, email, IEEE member #, grade, signature, date, and amount enclosed.



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The Long Island IEEE Professional Activities Committee for Engineers (PACE)

Presents a Tutorial Course on:

Linux Self Booting-Self Contained CD-ROMs

Conducted by

Edward Dowdell

Sponsored in part by the Long Island Section of IEEE

Overview

The IEEE Long Island Section PACE committee is presenting a tutorial course focusing upon the new tools available to Consultants for rapid and easy use with Client PCs; the swift and secure repair, resurrection and maintenance of Computer Engineers and Consultants PCs; and the parallel development tools within new Linux Systems.

Who Should Attend

Consulting engineers who use Computers to provide solutions to Client's problems now have a radically new way to transport many unique application programs containing solutions to the Client's problems directly to the Client's home PC, without having to carry anything more than a CD-ROM and Thumb Drive to the customer's facility. This course is of equal importance to Consultants, Computer Engineers and Professional Engineers (who now require CEU credits for license renewal)

CEU Credits

0.2 CEUs will be awarded to participants who request them. For those who want Professional Development Hours (PDH), 2 PDH credits are equivalent to 0.2 CEUs.

Key Benefits

A radically new product ~ a full Linux operating system with support applications on a self-booting CD-ROM ~ is taking the IT world by storm. IT and network managers are using these CD's to restore or resurrect defective servers and networks. They do not need the native OS's to run on a platform, but can employ Antiviral programs on the CD to rid the native system's hard drive of viruses and other defects.

When combined with a solid-state "Thumb Drive", these CD's enable an engineer to move about with a fully bootable Linux OS and its applications, plus saved data from that application, in their suit jacket side pocket.

Content

The course is comprised of 3 sessions of 40 contact minutes each. All the same evening.

Basic Concept(s): Operational Capabilities, functions and many ideas and tips that haven't been taught or widely implemented yet.

The bootable CD-ROM as a Recovery Tool: Case histories of how they've been successfully used to restore networks and PC's from disastrous attacks (or even Operator errors!). New CD-ROMs are coming to further broaden the usefulness of these new tools and how "roll-your-own" CDs are made.

Review and Q&A session: A review of the Linux CD-ROM's relevant applications for Computer Engineers and Consultants of Linux's advantages over MS products. This is followed by an interactive Q&A session covering the Linux system, PC recovery, and productively using the CD-ROM with a thumb-drive.

Instructor

Edward Dowdell is Founder of the Computer Literacy Society and has 48 years of industry experience in many differing Engineering & Management positions. He also is the inventor of the "Hand-Swiped" Credit Card Reader and the PolyPlex RF Network Communication System. His lecturing experience with PCs dates back to 1978 and computer design and use experience covers Simulation, Robotics, Analog & Digital processes and Business applications.

Location and Time

Location: Briarcliff College,

Date: May 4, 2005

Time: 7:00 PM

MAP: <http://www.licn.org>

For further information contact Irwin Weitman at 631 266-2651 or at i.weitman@ieee.org.

Registration:

LICN members need **NOT** register. All other attendees must register. There is **NO REGISTRATION FEE**.

Those participants that wish to earn CEU's must register, using the form below and submit a check in the amount of \$15.00 made payable to "IEEE Consultants' Network of Long Island with the form.

Registration Form Linux CD-ROM Workshop,	
Make checks payable to "IEEE Long Island Section". Submit check and registration form to Irwin Weitman, 196 Cedrus Avenue, East Northport, NY 11731	
Mr./Mrs./Ms. _____	
Home Address: _____	
City and Zip: _____	
Phone: _____ E-mail: _____	
IEEE Member #: _____ Grade: _____	
Request for CEU credit. P.E. NYS Lic. # _____	
Signature: _____	
Date: _____	Amount enclosed: \$ _____



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The Long Island Chapter of IEEE Electromagnetic Compatibility Society is presenting a lecture titled:

Naval Air Warfare Center Electromagnetic Environmental Effects (E³) Division Capabilities

Tuesday, May 10, 2005, 6:00 PM

Who Should Attend?

Any individual involved with Electromagnetic Environmental Effects testing and/or leveraging test requirements. This session will highlight the need for E³ testing, and the test specifications that the NAWCAD E³ facility can achieve. A detailed description of this leading edge E³ test facility will be presented. Individuals requiring E³ testing will leave with a detailed knowledge of this vast facility.

Speaker:

Mr. Kurt Sebacher, Chief Engineer Integrated Combat Environments Division, NAVAIR Patuxent River, Maryland

Abstract:

NAWCAD E³ facility is a vast test facility with over 15 specialized facilities. The test facility is capable of providing nearly every E³ test requirement that is used today. This includes MIL-STD-461, MIL-STD-464, ADS-37, DO-160, FAA/JAA, MIL-STD-2169, TEMPEST standards...etc. The test facility can handle test items from component level to a Boeing 747 or larger. The test facility can accommodate both low and high-level test requirements. The test facility is integrated into an Installed System Test Facility (ISTF) that can be used for virtually any type of stimulation/simulation requirements.

Seminar Coordinators:

Mr. Sandy Mazzola, Mr. David Sterner, and the Naval Air Warfare Center, Electromagnetic Effects Division.

Speakers Credentials:

Kurt Sebacher has worked for the NAWCAD E³ facility for 18 years. He has been a lead test engineer for several programs, manager of the E³ test facility, and lead engineer for the Integrated Combat Environments division. Kurt earned a BSEE from Virginia Tech.

Location, Time, and Registration: Location, Time, and Registration:

This lecture will be held at BAE Systems located at 450 Pulaski Road, Greenlawn, NY. The facility is located just east of Park Ave (Suffolk County Rte 35) on Pulaski Road. The presentation will begin at 6:30 PM. Appetizers, snacks & beverages will be served starting at 6:00 PM. Seating is limited. If you wish to attend, an RSVP is required by no later than May 09, 2005. To register please visit the calendar page of the IEEE Long Island Website, WWW.IEEE.LI, click on the registration link, and fill out the form.

30 YEARS AGO By: Rod Lowman, Historian

The Section meeting featured a presentation called *“Rebirth of the Electric Car: All New and All Electric, or A Converted Engine Car”* by Robert Hickson, Marketing Engineering Manager of LILCO. He was also research coordinator for the Electric Vehicle Research Program on Long Island. Why was LILCO interested in electric cars? As Mr Hickson put it, he encourages the development of any and all storage systems which consumers can fill with KWHrs each night in anticipation of time of day metering with lower rates in low use hours. He anticipated that vehicle batteries and heat tanks would be the primary holders of discounted KWHrs.

Mr Hickson forecast that 20% of the registered vehicles on the roads would be electric by 1990 or 2000 at the latest. Timing he said will be up to the auto manufacturers. First they must concede that there is a market for electrics, then they will need to decide whether to put motors and batteries in cars designed for engines or to build automated assembly lines for complete new designs.

Electric cars first became popular in the 1920’s. However, at that time most motorists traveled short distances and were satisfied with low or moderate speeds. When roads improved and motorists demanded higher speed and greater distances the electrics lost out to the gasoline driven cars. So, for the next 80 years gasoline and diesels ruled the roads.

That Mr. Hickson’s predictions were optimistic is not surprising. It has been my observation that long term, high cost consumer investments like houses and cars change much more slowly than short life, inexpensive investments like telephones, cameras and tape or disc recorders. More weight efficient batteries remain a major limitation of electrics. It must cause Mr. Hickson some chagrin to realize that it now appears that hybrids (which use none of the utilities excess KWHr’s) will be a useful intermediate to the all electrics. Further chagrin may arise if the hydrogen fuel cell/electric models win the development race. However, it was a very useful analysis of the unsolved problems and the potential solutions as of that time.

Fortunately Mr. Hickson did not put all his eggs in one basket, he was also a member of the Eastern Solar Applications Committee that provided utility guidance on Solar and Geothermal areas.



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P.O. Box 1331
Piscataway, NJ 08855-1331