

Chairman's Message

By Babak Beheshti

b.beheshti@ieee.org



What is professionalism? Word meanings migrate. Such "semantic slippage" may occur by chance, or because message managers perceive value in appropriating or redirecting connotative meanings. "Computer hacker," for example, once suggested skill in problem-solving--a positive personal attribute. Now it designates malicious (if not also felonious) stealth.

"Professionalism" is another such word--one we may think we fully understand until we wrestle with how the meanings of that word apply in particular situations. Conflicted opinions invite reflection and debate--an opportunity for growth in understanding, if not agreement. So it is for the concept of "professionalism." In an age when endeavors ranging from aroma therapy to zymometry claim to be "professions", it is appropriate to question how disciplines and individuals become "professional." Some consider "professionalism" to be defined

by knowledge, training, experience and formal recognition of skill (e.g., certification and licensure), and by our attitudes about those we seek to serve. Others consider professionalism less a state of being than a set of identifiable behaviors such as punctuality, effective teamwork, and accepting responsibility for actions, inactions, and reactions. Here is a place to begin. To "profess" something is to take it seriously and "to be professional" is to serve in a skilled and responsible manner. What do we "profess" as specialists in engineering, and how is our "professing" related to our vocations? What does "professionalism" mean to us, and what do we mean when we claim to be "professionals"?

Let us start with this issue on a daily basis: Are we treating our fellow workers, managers and subordinates as professionals? Are we allowing our personal feelings and misgivings interfere with our profession? Are we prejudging others without sufficient information? Do we forget that respect is the underlying element in our interactions? It is not only the technical competence that makes us professionals. It is the human aspects of our work ethics that define us as professionals as well.

Have a prosperous October!

Babak D. Beheshti, Chair

DISTINGUISHED LECTURER IEEE / LEOS

SPEAKER: PROF. RICHARD DE LA RUE
Dept. of Electronics & Electrical Engineering
University of Glasgow, Scotland UK

TOPIC: *Photonic Crystals and Photonic Microstructures*

DATE: Thursday, Nov. 9, 2000

TIME: 6:00 - 7:00 PM

PLACE: Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, NY 11742-1300

Contact: block@symbol.com

Dinner will be served after lecture. Please RSVP via E-Mail.

DISTINGUISHED LECTURER IEEE / COMSOC

SPEAKER: Dr. David Falconer, Department of Systems and
Computer Engineering at Carlton University in Ottawa Ontario

TOPIC: *Broadband Wireless Access Systems Using Millimeter
Waves - Problems, Opportunities, and Technologies*

DATE: Week of Nov. 13, 2000

TIME: 6:00 - 9:00 PM

For further information contact Dave Mesecher at 631 592
7300 or at d.mesecher@ieee.org

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http://www.ewh.ieee.org/r1/long_island

!

Who Needs UCITA?
Merrill W. Buckley, Jr.
2000 President,
IEEE-United States of America



I'll admit, it sounds boring: the Uniform Computer Information Transaction Act. But UCITA (rhymes with, 'you don't need a') will turn you from someone who owns information technology, to someone who is allowed - for a time, and at a price, as long as you don't make it work better -- to use other people's property. That's a bad idea, which is why the IEEE-USA is fighting it on your behalf.

And we will need your help to win.

In a way, UCITA is an attempt by software manufacturers to modernize the different state laws that govern commerce, which are often outdated when it comes to the shifting paradigms of the New Economy. That needs to be done, and as the U.S. members of the world's largest technical society, we're ready to help.

But the actual "one size fits all" law that UCITA backers want to pass amounts to a free pass for the software industry. If you work with computers, especially if you like to tweak and tinker with technology, you should oppose UCITA. Most of all if you depend on software for doing business you should join us in presenting a comprehensive, unified opposition to this terrible, Trojan Horse legislation.

Consider the following true life example. A contractor buys software to prepare the complex bids on which his business depends. All he has to do is fill out pre-programmed forms with all the variables, and it will tell him what to bid, to meet his needs with the all-important competitive edge to get the contract. So he carefully works out what materials he needs, staffing, and budget projections - and he confidently offers what he is certain will be the winning bid.

But it's not. A competitor bid less. Astonished, he double-checks his losing bid - by hand this time, to learn that the software wasn't so reliable after all. It added when it should have subtracted - costing him the contract, maybe killing his company.

In most states, he could sue the software maker for a defective product. But by buying the software with its liability-waiving license written in dense small print further obscured by shrinkwrapping, he had given up the right to sue - in states that have passed UCITA. (Has yours?)

Not only will this be a kind of "get out of jail free" card, handed over to the software manufacturers every time we buy or use software, or anything which has software in it - which soon mean just about everything. But it will also have a chilling effect on innovation and competition - to say nothing of accountability - for software makers and users alike. If you tweak your devices to work better, you may have violated your license - not to speak of professionals who reverse-engineer for improvements or compatibility. And if you violate your license, UCITA authorizes the software maker to disable your equipment.

Because UCITA is a battle to be fought, state by state - not the U.S. Congress - it is a example of the old adage: "All politics is local." Go to <http://www.ieeeusa.org/grassroots/ucita> to find out if your state legislature has taken up UCITA, and what you can do to fight it.

Long Island Section Officers
Chair. Babak Beheshti
1st Vice Chair Robert Bruce
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Secretary. Anthony Natoli
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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@ieeee.org

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phone: (800) 678-IEEE
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PULSE Deadlines

For Nov. 2000: **10-8-00**
For Dec. 2000: **11-8-00**

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IEEE Long Island Section Calendar

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

Please visit our web site at http://www.ewh.ieee.org/long_island/ for up to date listings, changes and corrections.

October 4, 2000 - LI Consultant's Network at 7:00 PM at Polytechnic Auditorium on Route 110 in Farmingdale. No pre-registration is required. For further info call John Dunn at (631) 549-6555

October 30, 2000 - EXCOM meeting at 6:00 PM, Call Bill Rooney, 631-231-3737 x 2174, ahead of time for access

October 30, November 1, 7, & 9 - Data and Computer Communications Seminar, For further info and registration call Dave Mesecher at 631 592 7300 or email to d.mesecher@ieee.org

November 1, 2000 - LI Consultant's Network at 7:00 PM at Polytechnic Auditorium on Route 110 in Farmingdale. No pre-registration is required. For further info call John Dunn at (631) 549-6555

November 9, 2000 – Distinguished Lecturer Series, *Photonic Crystals and Photonic Microstructures*, Symbol Technologies, Contact: block@symbol.com

November 13, 2000 – Distinguished Lecturer Series, *Broadband Wireless Access Systems Using Millimeter Waves - Problems, Opportunities, and Technologies*, contact Dave Mesecher at 631 592 7300 or at d.mesecher@ieee.org

November 16-17, 2000 - Introduction to Wireless and Cellular Systems Seminar. For further info and registration call Babak Beheshti at (516) 686-7437 or email to b.beheshti@ieee.org

November 27, 2000 - EXCOM meeting at 6:00 PM, Call Bill Rooney, 631-231-3737 x 2174, ahead of time for access

*Consultant's Nwk
Advertisement*

The Long Island Chapter of the IEEE Communications Society
presents a seminar on:

Data and Computer Communications

Oct. 30, and Nov 1, 7, & 9
6:00 - 9:00 PM

Overview

The Long Island Section of IEEE and its Communications Society are presenting a four session (3 hours per session) training course “*Data and Computer Communications*”.

Who Should Attend

This course is intended for managers involved in telecommunications, entry level engineers intending to master basics of this field, and practicing engineers who need to develop inter-device communications. Individuals with no background in telecommunications can benefit from this seminar.

Key Benefits

- Learn the terminology and fundamental key concepts of data communications
- Understand sufficient amount of the technology to be able to do further study on your own
- The uses of various telecommunications technologies, and their pros and cons.

Content

What you will learn: The seminar will cover physical layer as well as higher layer aspects of both wired and wireless data communication. Included in the discussion will be the formats of the following data-transfer technologies, what they are used for, and how they perform: HDLC, X.25, TCP/IP, LAPD, ATM, Packet, T1, E1, RS232, MAC, ADSL, Ethernet, ISO Network Model, Wireless LAN (802.11). In addition, an overview of the Internet Infrastructure will be given, explaining the functions of components such as routers, bridges, hubs, and servers.

Seminar Coordinator

David K Mesecher is the Chairman of the Long Island Chapter of the IEEE Communications. He is currently employed at Layer One Communications, where he is involved in the development of mobile wireless technology business.

Instructor

Anthony Bowden is the Director of Software Engineering at InterDigital Communications, Corp. He has done extensive development of telecommunications software for InterDigital, and for Periphonics prior to InterDigital.

Location and Times

The seminar will be given in Western Suffolk County area, 6:00 to 9:00 PM. Registrants will be advised of the exact location and receive an acknowledgment by mail shortly after registration. The seminar is wholly the responsibility of IEEE Long Island Section and the instructor.

For further information contact Dave Mesecher at 631 592 7300 or d.mesecher@ieee.org

Fees will be refunded in full if the seminar is canceled or the registrant cannot be accommodated due to capacity limitations. Other refunds will be considered.

Registration Fees

Payment Due	Public	IEEE or LIFT Member	Student/Life
By Oct 16	\$350	\$300	\$200
After Oct 16	\$400	\$350	\$250

Note:

2000 membership card required at first session. Not applicable to affiliate members.

Registration Form

Data and Computer Communications, Oct, 2000

Make checks payable to “IEEE Long Island Section”.

Send form to Dave Mesecher, 9 Beverly Rd,
Huntington Station, NY 11746

Mr./Mrs./Ms.

Name: _____

Company: _____

Home Address: _____

City and Zip: _____

Hphone: _____ Bphone: _____

Fax: _____ email: _____

Member #: _____ Grade: _____

Amount enclosed: _____

Date: _____

*IEEE Communications Society,
IEEE Signal Processing Society,
and IEEE Long Island Section Present*

Introduction to Wireless and Cellular Systems

11/16/2000, 11/17/2000
6:00 – 9:00 PM

Overview

The Long Island Section of IEEE is presenting a two session (3 hours per session) training “Introduction to Wireless and Cellular Systems”. This seminar covers the history and basic air interface issues in the wireless and cellular telephony systems.

Who Should Attend

This seminar is intended for engineers and managers with interest in this topic but who have not yet gained the introductory background in concepts and terminology.

Content

- An understanding of the fundamental terms and principles of wireless and personal communications.
- Identify important characteristics of first and second-generation cellular systems: AMPS, GSM, IS-136, and IS-95.
- Identify the fundamental operation of the three major air-interface access technologies: Frequency, Time, and Code Division Multiple Access. (FDMA, TDMA, CDMA).
- Compare and distinguish FDMA, TDMA, and CDMA.
- Introduce the impact that a multipath fading communications environment has upon system operation and outline some techniques to minimize this impact.
- Describe the fundamental tradeoff between capacity and coverage in a cellular system and understand the role of frequency reuse, cell sectorization, and cell splitting.
- Introduce the importance of interworking in wireless systems (IS-41).
- Identify the goals of third generation mobile systems.

Seminar Coordinator and Instructor

Babak D. Beheshti is the Chairman of the IEEE Long Island Section and the Signal Processing Society Chair.

Location and Times

The seminar will be given in Melville, NY, 6:00 to 9:00 PM. Registrants will be advised of the exact location and receive an acknowledgment by mail shortly after registration. The seminar is wholly the responsibility of IEEE LIS and the instructor.

For further information contact Babak Beheshti via email at b.beheshti@ieee.org or by phone at 516-686-7437.

Fees will be refunded in full if the seminar is canceled or the registrant cannot be accommodated due to capacity limitations. Other refunds will be considered.

Registration Fees

Payment Due	IEEE members ²		
	Public ¹	member	student/life
Nov. 3	\$450	\$375	\$250
Nov. 10	\$525	\$450	\$300

Notes:

1. Includes IEEE Associate New Member dues for those who submit an application at the seminar.
2. 2000 membership card required at first session. Not applicable to affiliate members.

Registration Form
Wireless Nov. 2000

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

Name: _____

Company: _____

Address: _____

City and Zip: _____

Hphone: _____ Bphone: _____

Fax: _____

Email: _____

Member #: _____ Grade: _____

Amount enclosed: _____

Professional Activities Report

By Irwin Weitman, PE

This past Labor Day weekend was the three-day event known as the PACE Conference. For the last two years it was called Professional Development Conference (PDC).

The attendees are primarily like me, local PACE Chairs, National PACE officers, IEEE-USA National officers and a few National IEEE officers. In addition to these, only members living in the immediate area attend because of the cost of travel and hotel expense. Like all IEEE meetings, ALL IEEE members are invited. This year it was held in Scottsdale, AZ. Fortunately, Scottsdale was in the midst of a cold wave. The temperature was down to 98 degrees when I arrived.

The business meetings include reports by Section PACE Chairs, describing professional activities of their sections in past year. Usually followed by discussion related to the success of individual programs and suitability for use by other sections. There were also presentations of platforms and plans of officers running for office and presentations by committee members relating to such subjects as H1-B visas and retirement related legislation.

It appears that this will be the last such convention coinciding with the Labor Day weekend. Cost is a significant factor and there have been complaints from members that this is an important holiday and they want to be with their families. I expect that future venues will be in less costly areas and attract more paying members to the educational courses offered.

IEEE-USA gets about \$27 from the dues we pay each year to IEEE. This portion is mandatory for all United States members. There are some members that object to this fee. The objections come primarily from academia. They argue that they get little benefit because their union contract gives them these benefits. It's a fact!

There isn't any benefit to the remainder of the IEEE members from the "Publish or Perish" aspect of most of the academic publications of IEEE. There is great benefit to both communities from the fact that IEEE is home to both of them. Furthermore, there are more benefits to American society from lobbying performed by IEEE-USA. An obvious example is the IRA retirement program, which IEEE-USA was instrumental in bringing before our legislators and the American public. This gave us and our families and IEEE received national recognition as a public minded organization. There has been for some time, an effort by some IEEE members from academia to remove the mandatory requirement that all USA members pay for IEEE-USA. Many of the USA members who do not understand the value of IEEE-USA may choose to save the \$27. This would so badly cripple IEEE-USA that it would become ineffectual and would eventually disappear.

Whether you agree or disagree with my appraisal please comment by e-mail and I will try to publish any constructive comment I receive.

My address is: I.weitman@ieee.org

VOLUNTEERS NEEDED TO HELP IN A ROBOTICS COMPETITION

Mr. Chris D'Ambrosio, a biology teacher at Rockville Centre's Southside Senior High School, is looking for engineers and other professional people to team with students in a national robotics competition. Information on this FIRST Robotics Competition is available from the FIRST Foundation's website <http://www.usfirst.org>. FIRST stands for "For Inspiration and Recognition of Science and Technology." There is a link to the ASME site: www.asme.org, which supplied the following quote:

"The competition requires an intense six week project for which industries and universities team with local high schools to design, construct and control a remotely operated vehicle for a sports based playoff whose objective changes each year. The FIRST competition is a large scale, made-for-television engineering competition which shows youth that no other career compares to one in science and engineering. Each team starts off with the same standard kit of parts and uses their creativity to design and build a vehicle capable of performing a demanding task.....the minimum budget needed for a FIRST team is approximately \$15,000."

Mr. D'Ambrosio can be reached at 516-393-5264 or 516-255-8947 during school hours, or 516-887-4295 after school hours. FAX messages sent to 516-766-7934 will be put in his school mailbox. His e-mail address is: bioteacher4@juno.com.

Candidates for LI Section Officers

The Nominating Committee of the Long Island Section has announced the following slate of Executive Officer Candidates for the 2000-2001 Administrative year:

Chair: Babak Beheshti
1st Vice Chair: Bill Rooney
2nd Vice Chair: Dave Mesecher
Secretary: Lisa Zannella
Treasurer: Christian DiFranco

Additional nominations may be made by petition during October. Petition nominations must be in writing, including the membership numbers and include the signature of at least 10 members of the Long Island Section. The petitions must be delivered no later than October 21, 2000 to be included on the ballot which will appear in the November issue of the Pulse.

In order to validate the nomination, it must include the member's name and his/her membership number.

Send nominations to:
Peterson Associates
50 Dennis Street
Garden City Park, NY 11040-5043

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30 Years Ago
Rod Lowman, Historian

In his state of the Section editorial in 1970, newly elected chairman, Art Rossoff, noted a gradual shift at IEEE national toward engineers economic and professional concerns in addition to their technical concerns. Quoting from his editorial, Art stated:

"The times are difficult in every arena and for all of society. For the engineer, it is a time of high unemployment and a weak economy. It is a time when our society has rebounded from the exhilaration of putting a man on the moon by reevaluating the priorities of its problems and of its resources. It is a time when the world has begun to understand the potential consequences of the destruction it has wrought on its own environment. It is a time of an unpopular and agonizing war. Against this background it is not surprising that engineers are asking questions about their own professionalism, about their role in society, and about their responsibilities for its actions."

He goes on to note that the Executive Committee of the Section had set as goals for the year Professionalism and Civic Responsibility. The Region One Committee had passed and sent to the IEEE Board of Directors a resolution (sponsored by our Section) calling on them to establish a portable pension plan.

Future programs and meetings were planned to provide further evidence of a new dedication on the part of the Section to serve the professional and civic interests of the membership.

Art recommended a three part program for the Section to try to attain Retirement Security. 1. Work to change federal legislation to extend the Keough plan to the salaried engineer. 2. Urge the IEEE to provide a group retirement policy similar to its present life and disability policies. 3. Urge industry to provide a cash option or at least a reduction of the waiting period for participation and vesting in company retirement plans.

Art was in an excellent position to note the shift in IEEE attitude toward professionalism as he, Joel Snyder and Victor Zorides initiated the movement and vigorously pursued it with the national officers in the previous year. Together they wrote the code of ethics, then pushed for support of the IEEE in professionalism and economic security. And after all these years, Art is still pursuing his civic responsibilities by promoting a science museum on Long Island and Joel through many offices in the section, region, USAB and now as president. Another L.I. Section initiative that has brought major changes in the IEEE.



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