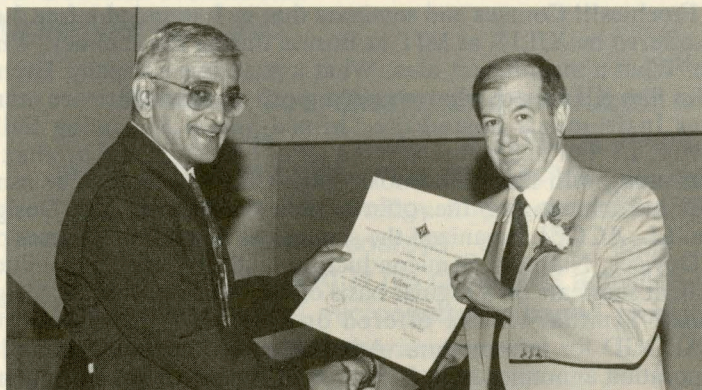


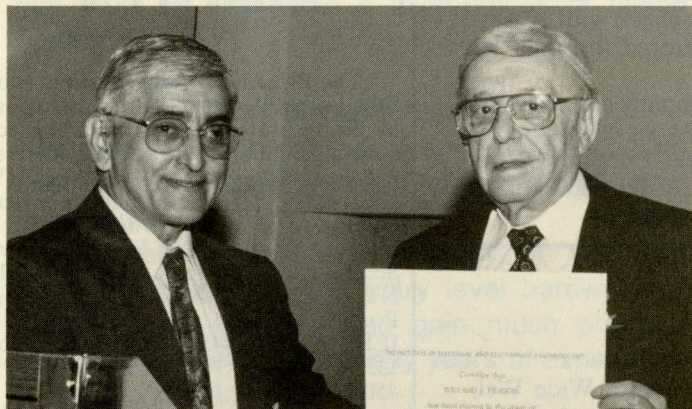
## IEEE LI Section Anual Award Ceremony

by Nader Bolourchi

Once again, award recipients; through their achievement, brought honor to themselves and their families and recognition to the LI section. Over 120 members and guests gathered together at an awards banquet ceremony, held on Sunday May 5th 1996, at the Huntington Hilton hotel to celebrate the achievements of twelve of our members. Dr. Yacov Shamash, the Dean of Engineering and Applied Science at the State University at Stony Brook was the banquet keynote speaker. Art Winston, Region 1 Director and Louis Pacieri Region 1 Chairman elect were among the distinguished guests. On this page are some photos of the IEEE Fellow Award recipients at the awards banquet.



Dr. Jerome Swartz (right) accepting his Fellow Award from Al Lopez (left) Awards Committee Chairman.



Willard J Pierson (right) accepting his Fellow Award from Al Lopez (left) Awards Committee Chairman.

## Professional Activities Report

by Irwin Weitman, P.E., PACE Chairman

The Long Island Section of IEEE and most of the other sections of Region I was faced with a serious dilemma. Electro attendance has seriously declined, resulting in a loss of operating funds for the local sections. The Executive Committee of the Long Island Section has wisely chosen a way to address the problem that gives our members multiple benefits.

We have chosen to sponsor a continuing series of educational programs that will provide our members with high quality courses at a technical level unavailable to our community, at attractive fees. This is beneficial to our members and it also provides a means for local companies to sponsor courses for their employees, that directly benefit the company. Previously, a company would have to pay for transportation of its employee to other parts of the country for a comparable course. The employee can live at home and the course can be held outside of regular business hours. Costs are reduced, everyone benefits and IEEE earns money to support its local operations.

If you have a special skill or expertise in a technology that is of practical use to others, are willing to share it with others, and are able to teach, please contact me or any other board member. Of course, the instructor is paid for his or her efforts. Our education committee will contact you to explore setting up the appropriate course.

So far, we have held successful courses and seminars on "Wire-less", "C", "C++", Windows, and Internet Use. Upcoming in the near future is more "C++", Embedded Processor Programming, and "R.F. and Analog Printed Circuit Design". Many others are being considered.

Companies interested in having courses run on their premises for their employees (and others), at discount rates should contact our education committee. This is surely a needed "WIN - WIN" opportunity for everyone associated with IEEE.



Richard J. Gambino Fellow Award recipient



Richard Mohr Fellow Award recipient



Joseph R. Fragola Fellow Award recipient



## EDITORIAL

by Lazaros Pavlidis

Freebies!!! Courses and seminars that is. I attended a free 3-day seminar for educators offered by XILIX at MIT in Boston during the summer. What a wonderful experience. What a magnificent idea. What a generous company. Events like these and companies like XILIX are what we need more of. And there are more. On September 19th Texas Instruments hosted the "Mixed-Signal & Analog Fall Seminar Series" on Melville, LI. For \$25 you received a lot of education and product updates on six specific topics along with free data books, gifts, CDs and more. The same day (unfortunately) ACCEL Technologies, Inc. offered their "Advanced PCB Design" seminar on Smithtown, LI. ACCEL organized the seminar as seven mini courses on specific topics. Analog Devices, National Semiconductors, and Harris Semiconductors are also offering excellent seminars on a regular basis on LI. Analog Devices' "High-Speed Design Techniques" Seminar will be offered on October 23rd at Smithtown, LI. Call 1-800-ANALOGD for information. Admission is just \$30, including lunch. Recently Avant! Corporation announced the formation of Avant! University, opening this fall and initially offering a tuition-free MSEE program for customers and employees and with a future goal of full academic accreditation!!! For more information on this check with Avant! at: <http://www.avanticorp.com>. Also, do not forget free lectures offered through the IEEE LI and NY sections.

Check the electronic magazines and newspapers you or your company receives. Set aside some time. Go to these seminars. It will be time well spent. As an engineer you know that you have to stay current on new products and technologies. I urge everyone that has the time (if not make the time) to attend as many of these terrific seminars as possible.

## WEBWATCH

by Babak Beheshti

In this series of articles, some interesting sites of the Internet's World Wide Web will be covered. Remember, in order to access these and any other Internet sites, you will need a PC, a modem and Internet access (through an Internet access provider e.g. America Online, Compuserve ...) Your local library may also provide you with Internet access. The first site that I want to introduce is one that must be visited by all IEEE members, namely the IEEE Web page. This Web site is rich with useful and professionally relevant information such as membership services, inside information on technical societies, active society Web pages, local activities and officer information, access to IEEE publications (including Spectrum), student activities and much more. You can even download a book through this site! The address for this site is "<http://www.ieee.org>". For those who are in the process of job hunting, the IEEE Web site provides employment services. Its USA Job Listing Service lists dozens of technical positions available, categorized by geographical regions.

## Windows/Office '95 Seminar New Information

Some changes have been made to the Windows/Office +95 Seminar offered for October. All dates decrease by one day because the seminar meets on Monday and Wednesday instead of Tuesday and Thursday. If you registered, are unable to attend because of this change, and have not been contacted, call to arrange for a refund not later than 10/4. If you have not registered and wish to do so, call not later than 10/4 to arrange an extension of the regular fee deadline.

The seminar meets in the Technology Transfer and Utilization Center Conference Room of SUNY Farmingdale.

1.5 Continuing Education Units have been approved for this seminar for those who meet the requirements.

Walt Whipple, the coordinator, may be reached at [w.whipple@ieee.org](mailto:w.whipple@ieee.org) or (516)738-3114.

## Long Island Section Officers

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1st Vice Chair. . . Harvey Altstadter  
2nd Vice Chair. . . Amnon Gilaad  
Secretary. .... Walter Whipple  
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### PULSE Deadlines

for November 1996	10-1-96
for December 1996	11-2-96
for January 1997	12-1-96
for February 1997	1-1-97
for March 1997	2-1-97
for April 1997	3-1-97
for May 1997	4-1-97
for June 1997	5-1-97

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## LONG ISLAND IEEE CALENDAR

(No membership requirements, no registration, no fees at meeting unless otherwise noted. IEEE Office is in the AIL Main Building on Commack Road, Deer Park, LI exit 52.)

**October 2, 1996 7:00 PM--** LI Consultants Network --- Michael Glass - Attorney at Law, will give a talk on the recent changes in patent law. Question and Answer period will follow the talk. Coffee, bagels and more talk at the Blue Dawn diner after the meeting. LILCO training center, off L.I.E. exit 57. For more information call Peter Buitenkant at (516) 491-3414.

**October 17, 7:15 PM. ---** The Engineering in Medicine and Biology Society (NY/North J/LI Chapter) ---SHIRLEE COHEN, M.S.,MPH,CS,CCRN will give a talk on "HIGH ALTITUDE MEDICINE". Rockefeller University Room 301 Weiss (Tower). For more information:Joel Levitt (212) 479-7805 (24hr Voice-mail).

**October 28, 6:00 PM** --- Excom meeting, At AIL

**November 6, 7:30 PM--** LI Consultants Network --- Walter Poggi, President of Retlif Labs, Ronkonkoma, NY will give a talk on "Myths and Reality of CE Marking". Coffee, bagels and more talk at the Blue Dawn diner after the meeting. LILCO training center, off L.I.E. exit 57. For more information call Peter Buitenkant at (516) 491-3414.

**November 9 -- 23, 8:00 AM- 5:00 PM, ---** Introductory C Workshop 1, by Walt Whipple, Ph.D., P.E. The workshop will be given on Saturdays at SUNY Farmingdale. For more information call Walt Whipple (516)738-3114 or e-mail at [w.whipple@ieee.org](mailto:w.whipple@ieee.org).

**November 14, 7:30 PM --** The Lasers & Electro-Optics Society. Professor Stephen R. Forrest from Princeton University will give a talk on "Organic Semiconductors for Optoelectronics". Polytechnic Farmingdale Campus, Route 110, Farmingdale, Main Building Auditorium. For more information call Marie Cotrone at (516) 738-4914.

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# IEEE Long Island Section Introductory C Workshop 1

November 9-23, 1996

## Overview

In this workshop, you will gain hands-on experience with the C programming language using the provided text "Absolute Beginner's Guide to C." You will manage, design, code, and test a series of problems using individual PCs in a lab environment. You will receive instruction in the C language sufficient to write small, useful programs that will prepare you to understand and develop more complex ones as you learn. Participants will need to continue learning and practice beyond the scope of this workshop.

## Who Should Attend

Attendees at the IEEE LIS C/C++/VC++ or Embedded Microprocessor seminars should attend this introductory workshop to gain actual C experience. The workshop will benefit engineers and programmers who have some programming background, perhaps with Basic or Fortran, who now need to use C. Managers who must make decisions about software development should attend. Computer Scientists and working programmers with C experience should probably not attend.

## Key Benefits

- Practice managing small team projects.
- Learn to analyze problems and construct algorithms to manage data and actions.
- Practice elementary C programming.
- Learn to design tests for programs as an integral part of development rather than an afterthought.

## Content

**C Language:** ; Preprocessor Commands; Data and Control; Programs.

**Algorithms:** Elementary data and control structures.

**Managing:** The development plan, monitoring, and feedback.

**Testing:** Assertions, intermediate results, and test coverage.

## Seminar Coordinator

**Walter L. Whipple, Ph.D., P.E.**

Dr. Whipple plans to teach and coordinate the workshop.

## Location and Times

The workshop will be given at SUNY Farmingdale in 190 Lupton on Saturdays, November 9-23, 1996, 8:00 a.m.-5:00 p.m. A light breakfast and lunch will be provided. 2.0 Continuing Education Units will be awarded to those meeting the requirements. The workshop is wholly the responsibility of IEEE Long Island Section and the instructor.

## Registration Fees

Payment Date	Public <sup>1</sup>	IEEE members <sup>2</sup>	
		member	student/life
October 7	\$350	\$250	\$200
October 21	\$400	\$300	\$250
November 9	\$500	\$400	\$325

### Notes:

<sup>1</sup> Includes IEEE Associate New Member dues for those who submit an application at the seminar.

<sup>2</sup> 1996 membership card required at first session. Not applicable to Affiliate members.

## Further Information

Contact Walt Whipple via E-Mail at [w.whipple@ieee.org](mailto:w.whipple@ieee.org) or (516)738-3114 (voice mail activates a pager). An acknowledgement containing travel directions will be sent to all registrants. Fees will be refunded in full if the workshop is canceled or the registrant cannot be accommodated due to capacity limitations. Other refunds will be considered.

### Registration Form

#### IEEE LIS Introductory C Workshop 1

Checks payable to IEEE Long Island Section  
Send to Walt Whipple, Four Deera Lane,  
Farmingville NY 11738-2296.

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City ST ZIP: \_\_\_\_\_

HPhone: \_\_\_\_\_ BPhone: \_\_\_\_\_

FAX: \_\_\_\_\_ Email: \_\_\_\_\_

Member# \_\_\_\_\_ Grade: \_\_\_\_\_

Amt Encl.: \$ \_\_\_\_\_ ProgLang: \_\_\_\_\_



IEEE Long Island Section  
Microprocessors and Software Seminar  
October 21,24,31, November 4,7 1996

Overview

The Long Island Section of IEEE is presenting a five session (3 hours per session) training course "Microprocessors and Software for the Novice". This seminar begins with a global discussion of microprocessors and their application in today's products, continues with introduction of development tools, selection criteria of a particular processor and proper concurrent design approach that must be applied to a microprocessor based system.

Who Should Attend

This course is for engineers and managers who need a better understanding of the terminology, advantages and pit-falls of today's microprocessor/software technology. It will also serve the needs of the entry level hardware or software engineer who can gain much practical knowledge based on the many years of experience of the engineer/instructor.

Key Benefits

- Learn the terminology and fundamental key concepts of any microprocessor based system
- Understand sufficient amount of the technology to be able to do further study on your own
- Understand what software and hardware tools are the minimum requirements for a successful development
- Be able to make trade-off decisions about a design before start of the project

Content

What you will learn: hardware/software, Make or buy?, What is a microprocessor, a bit of history, what can it do, Microprocessors vs. Microcontrollers, Families of processors, Abilities and constraints, The design cycle, Hardware design issues, Software design issues, Selection of processor, Selection of tools: Compilers, simulators, in circuit emulators, logic analyzers ..., Assembly or High level programming? Specific design examples, A live walk through of a simple application development from program development to compilation and execution.

Seminar Coordinator and Instructor

Professor Babak D. Beheshti is a faculty member in the School of Engineering and Technology, New York Institute of Technology and a consultant. He has taught many courses on the topic of microprocessors, and in his consulting activities he has many years of microcontroller based products and systems design experience.

Location and Times

The seminar will be given in the Old Westbury campus of New York Institute of Technology on Monday and Thursday evenings, 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 Prof. 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	Public <sup>1</sup>	member	IEEE members <sup>2</sup> student/life
Oct 15	\$350	\$240	\$190
Oct 20	\$400	\$290	\$240

Notes:

1. Includes IEEE Associate New Member dues for those who submit an application at the seminar.
2. 1996 membership card required at first session. No applicable to affiliate members.

Registration Form

**Microprocessors/Software Oct. 96**

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: \_\_\_\_\_

30 Years Ago

by Rod Lowman, Historian

In Oct. of 1966 the section and the MTT invited their old friend Kiyo Tomiyasu from General Electric Microwave Laboratory to talk about "What are Lasers Good For?". Kiyo had started his industrial career with six years at what was then the Sperry Gyroscope Company in their Microwave Research Lab. As with many other fine engineers, his Long Island start has propelled him into a long and productive career in microwaves and life long service to the IEEE and especially the MTT. Kiyo had already been President of the MTT, was active in standards, was a perennial member of the program committee for the MTT International Conferences. He has since served as President of the Quantum Electronics Council, was guest editor of MTT publications, on the Editorial Board of the Proceedings, and very active in the Awards Program of the IEEE. In the IEEE, you name it, Kiyo has been there.

But back to his presentation - Kiyo listed many of the possibilities foreseen for the laser, from welding, to drilling holes and optical communications. He concluded that the possibilities appear to be tremendous. "Perhaps the greatest uncertainty, assuming favorable technical developments, is the economic factor." It was amazing how soon the economic uncertainty disappeared and how ubiquitous the laser has become in so short a time. The laser is now used everywhere, from the perforation of computer paper, the reading of compact discs, to safety stops on garage door openers.

I didn't realize just how ubiquitous they had become until about ten years ago when we were on vacation in the French Polynesian Islands in the South Pacific and decided to bring home some local craft items as souvenirs. We stopped in to

the local market and picked out some very attractive and well crafted brooch pins carved from abalone shell. Picturing a stalwart Polynesian bent over the workbench in his palm thatched cottage, we asked what tools the craftsmen used to carve the hard and brittle abalone shell. The shop keeper said he didn't know exactly but it was some sort of computer controlled laser cutter! I am sure that even Kiyo is amazed at how widespread the applications of his developments have become in so short a time.

So keep coming to the IEEE meetings, the high tech development you are learning about may become the household item that makes life easier for everyone 30 years from now.

IRWIN WEITMAN AND HARVEY  
ALSTADTER  
WIN USAB AWARDS

Irwin Weitman was awarded the USAB Citation of Honor for his work with the Consultant's Network on Long Island; for his untiring efforts to establish the Alliance of IEEE Consultant's Networks as a new member service for self employed engineers and his initiation of an Economic Development Committee on L.I. to promote business opportunities which will employ engineers.

Harvey Alstadter was awarded the USAB Professional Achievement Award for setting up a Skills Inventory Database of unemployed and under employed members of the Long Island Section and for providing monthly meetings with topics specifically for this group of members.

These awards would have been formally presented to Irwin and Harvey at the PACE weekend in Phoenix had they been able to attend. Our congratulations to you both!

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