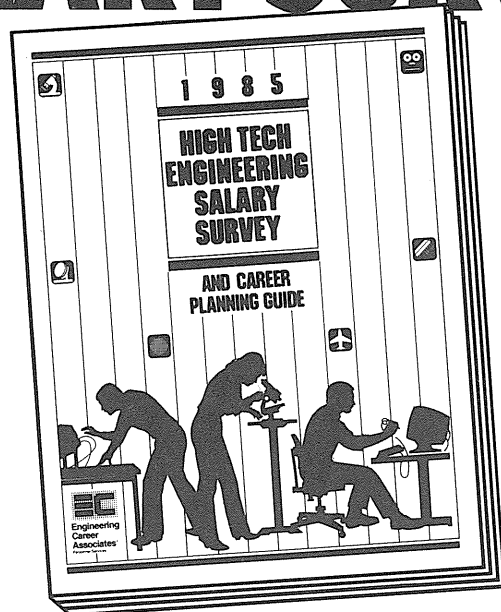


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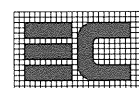
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The IEEE

# Newsletter

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

MARCH, 1985

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### NEWSLETTER STAFF

Editor ..... M.M. Perugini  
Business Manager ..... A.M. Beattie

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### REPORT ALL ADDRESS CHANGES TO:

IEEE Service Center  
445 Hoes Lane  
Piscataway, N. J. 08854  
(201) 981-0060

It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

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544-2334/2412  
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### 1985 FELLOW AWARD WINNERS FROM THE IEEE NORTH JERSEY SECTION

**Jonathan B. Allen, AT&T Bell Laboratories**

"For contributions to speech analysis and synthesis systems"

**Edward G. Coffman, Jr. AT&T Bell Laboratories**

"For contributions to the theory of computer operating systems"

**Leonard G. Cohen, AT&T Bell Laboratories**

"For contributions to optical fiber diagnostic measurements and single-mode fiber designs"

**Reed E. Fisher, AT&T Bell Laboratories**

"For contributions to the implementation of cellular mobile telephony"

**C. Geoffrey B. Garrett, AT&T Bell Laboratories**

"For contributions and leadership in MOS integrated circuit technology"

**Thomas J. Martin, Public Service Electric and Gas Co.**

"For leadership in the development and implementation of electrical engineering and construction standards for nuclear power plants"

**Robert H. Shennum, AT&T Bell Laboratories**

"For contributions to the design and implementation of satellite communication systems"

### REGION 1 AWARD IN ELECTRICAL ENGINEERING MANAGEMENT

**Kenneth J. Oexle, Jersey Central Power and Light Co.**

"For leadership in the design and development of high voltage electric power system distribution facilities"

95970 NJ

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1241264 SM  
RICHARD F TAX  
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# Effect Of Technology On Mathematics Curriculum

“The Effects Of Technology On The Mathematics Curriculum” is the title of the talk to be presented by H.O. Pollak of Bell Communications Research, Inc. at a March 20, 1985 meeting sponsored by the North Jersey Chapter of the Systems, Man, and Cybernetics Society and the Princeton Section of the IEEE.

### About The Talk

Society provides the time so that students take mathematics every year while they are in school. Why? Probably not because mathematics is beautiful--which it is--or because it provides great training for the mind, but because it is so useful.

If usefulness is the fundamental reason for teaching as much mathematics as we do, then we must exhibit, exercise, and emphasize this usefulness at every opportunity. Furthermore, as what is useful for society changes, we must change what we teach and how we teach it. But why should what is useful to society change? Because of technology! We must therefore examine HOW technology relates to the teaching of mathematics.

The speaker will examine a number of aspects of the relationship between mathematics and technology. There is, first of all, the use of technology to help in teaching existing mathematics--for example, for practise, tutoring, applications, diagnosis, simulation, or test management. There are topics within mathematics which were previously pedagogically beyond the schools, but which we always had wished we could teach. Technology makes some of these possible. There are other topics which technology makes necessary. More generally, technology changes the priorities among topics and their potential importance for all students.

On a different level, mathematics itself may be changed by technology, and our planning must take this into account. We may also expect changes in the incoming student; technology may aggravate the already difficult problem of inequality of access to education opportunity. Finally, we may expect that technology will have a profound effect on the style of our teaching.

### About The Speaker

Henry O. Pollak is Assistant Vice-President, Mathematical, Communications, and Computer Sciences Research Laboratory, Bell Communications Research, Inc.,

Morristown, N.J. For the previous 22 years, he was Director of Mathematics and Statistics Research of Bell Laboratories.

Dr. Pollak received his BA from Yale University in 1947, and MA and PhD degrees from Harvard University in 1948 and 1951. Dr. Pollak has received honorary Doctor of Science degrees from Rose-Hulman Institute of Technology, Monmouth College, and from The Technological University, Eindhoven, The Netherlands. He was elected a Fellow of the American Association for the Advance of Science in 1971.

Since joining Bell Laboratories in 1951 he has engaged in mathematical research in communication. He is the author of over 35 technical papers on analysis, function theory, probability theory and mathematics education. He holds a patent (joint with Dr. R.L. Graham) for his work on Interconnected Loop Digital Transmission Systems.

**Time:** 6:00 PM, Wednesday, March 20, 1985.  
**Place:** Room C-217, (Convocation Room), Engineering Quadrangle, Princeton University.  
**AFTER-Meeting Dinner:** 7:30 PM, Nassau Inn, Princeton, N.J.  
**Information & Dinner Reservations:** Dr. Ben Ashjari (201) 981-3528 or Dr. Gabriella Sechi (609) 771-2203.

## Armament/Battlefield Robotic Systems

Dr. Norman Coleman will review recent progress and developments in control systems technology for future armament and battlefield robotics systems applications in a talk sponsored by the North Jersey Section of the Control Systems Society on March 28, 1985.

### About The Talk

The presentation will cover topics in digital weapons control, adaptive control and “intelligent” controls. The issues related to the latter include: Methodology and software tools to support design; algorithm implementation and evaluation; and fire control/weapon platform automation. An approach based on the hierarchical control architecture originally proposed by Albus, et al will be discussed.

### About The Speaker

Norman P. Coleman is currently head of the Control Systems Technology Program of the Fire Control and Small Cali-

ber Weapon Systems Laboratory at ARDC. He was formerly Staff Mathematician at the Army Armament Command in Illinois, and an adjunct Professor at the University of Iowa. Dr. Coleman received his BA from the University of Virginia and his MA and PhD in mathematics from Vanderbilt University.

**Time:** 7:30 PM, Thursday, March 28, 1985.  
**Place:** Jersey Central Power & Light Co., Punch Bowl Rd. off Madison Ave. (Rte. 24) Morristown, N.J.  
**Pre-Meeting Dinner:** 5:30 PM, the AFTON Restaurant, Hanover Rd. & Columbia Turnpike, Florham Park, N.J.  
**Information & Directions:** Kushal Jain (201) 265-2000, Daniel Tuey (201) 567-9004, Frank Kuhl (201) 724-6267 (D), (201) 663-1381 (E).

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

**Enclosed in this issue is a Complimentary Pre-Registration Application for ELECTRO/85. Be sure to use a 22 cent stamp instead of the 20 cent stamp called for on the form, which was printed prior to the change in postage rates. Be sure to send the form prior to April 9, 1985!!**

## NJ PACE Meetings

Monthly meetings of the North Jersey PACE Committee will be held at the ITT Tower Lobby, 500 Washington Avenue, Nutley, N.J. at 8 PM on the second Wednesday of every month. Free refreshments will be offered to all.

There are many active hot PACE Projects funded by IEEE’s USAB from which you benefit. Here’s your chance to learn about them and give your input!

Call Maitland McLarin, PACE Chairman at (201) 335-6847 for additional information.

## Railroad Conference

The 1985 IEEE-ASME Joint Railroad Conference will be held at the Roosevelt Hotel in New York City from April 16 through 18, 1985. For additional details contact Tom Marple, NJ Transit, 95 Orange St., P.O. Box 720, Newark, N.J. 07101 (201) 648-7964.

## Engineering Workstations

### A PANEL OF REVOLUTIONARY LEADERS

“A unique group of probably the best speakers on this subject in the world; they have never appeared together before and may never do so again.” If you have any interest in this subject, you shouldn’t miss this seminar.

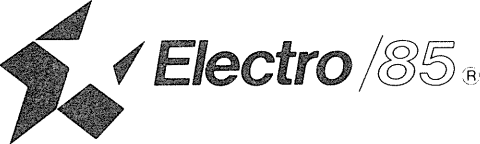
A revolution in electronic design methods is altering forever the way we design. Increasing product complexity and ever shorter product market lifetimes, present a terrible design dilemma which is being met by engineering workstations.

The evolution in semiconductor technology that has allowed us to keep pushing the limits of system complexity has also reduced the cost of computing power thus allowing us to build affordable engineering workstations to manage the design of even more complex systems.

Electro ‘85 opens one day after the New York Metropolitan IEEE Council presents the most prestigious panel of Engineering Workstations revolutionary leaders. David Stamm, VP Engineering Daisy Systems; Stephen Swerling, VP Engineering, Mentor Graphics; Thomas McWilliams, VP Valid Logic, winner of 1984 IEEE McDowell Award for his work on Structured Computer Aided Logic Design; and Bruce Gladstone, President, FutureNet provide an unusual spectrum of views on this revolutionary topic. Andrew S. Rappaport, President, The Technology Research Group, with Justin E. Harlow, Fairchild; Cecelia Jankowski, Grumman Aerospace; and Kathy DelCasale, Harris GSSD will report their perspective as typical engineering workstation users.

Concluding with a panel discussion responding to audience questions, this tutorial is presented for the benefit of those who have not yet joined the engineering workstation revolution. It should help answer the question: “What CAD tools will be used by the survivors of this design revolution?”

This seminar is co-sponsored with the IEEE Maine Computer Society Chapter and organized by John Andrews, Chairman, who will act as moderator.

	<input type="checkbox"/> Artificial Intelligence	IEEE/ERA Member \$165	Non-Member \$205	These prices are for advance registration received <b>BEFORE</b> April 11. <b>AFTER</b> April 11 add \$50 to the price of the tutorial.
	<input type="checkbox"/> Computers and the FCC	\$170	\$210	
IEEE Tutorials Registration	<input type="checkbox"/> Engineering Workstations	\$175	\$215	
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	Enclosed is a check for \$_____ payable to: IEEE METSAC, 614 Hammond Street, Chestnut Hill, MA 02167. Registrations will not be accepted without payment. Names are required for registration.			

## Fiber Optic Applications in Electrical Power Systems

The content will include a systematic treatment of fiber optics (components, waveguides and cable connectors), various modulation techniques, economics and applications in communications, measurement and control. The tutorial will conclude by covering what’s next and how to get started in implementing the technology.

*The speaker is:*

D.C. Erickson, Bonneville Power Administration, Portland

*The topics are:*

FIBER OPTIC BASICS

VARIOUS MODULATION TECHNIQUES USED IN PRACTICE

ECONOMICS OF LIGHT WAVE OVER CONVENTIONAL COMMUNICATION METHODS

GENERAL INTRODUCTION TO FIBER OPTIC APPLICATIONS

COMMUNICATION APPLICATIONS

MEASUREMENT APPLICATIONS

CONTROL APPLICATIONS

WHAT’S NEXT AND HOW TO GET STARTED

The coordinator for this course is Len Rubenstein, Stone & Webster

Six Tutorials Featured at Electro/85 and Mini/Micro

The IEEE Metropolitan Sections Activities Council (METSAC) and Electro/85 will cosponsor six special-fee tutorials on Monday, April 22 from 9:00 am until 5:00 pm in the Sheraton Centre Hotel Ballrooms in New York City.

Registration for these tutorials must be accomplished with the coupon at the end of this article. Included in each tutorial fee are course materials, lunch and Electro/85 registration which is also valid for Mini/Micro Northeast. We urge you to register early to insure that there will be room for you.

Artificial Intelligence (AI)

This course is designed for computer software specialists, engineers and technical managers who are, or will be, responsible for AI applications. It will cover fundamentals of AI with special emphasis on building expert or knowledge-based systems (ES or KBS). Therom proving, learning approaches, and AI languages will be covered. Important applications and AI's future direction will be discussed.

Specifically the content is: Overview of AI. Introduction to ES. Basic concepts for building ES. Architecture for small and large search space. Heuristic search. Learning systems. Introduction to AI programming languages, LISP, and Prolog. Knowledge-based building tools. AI or LISP processors. Automated reasoning concepts and applications. Applications of ES for robotics, automation, management, space, military, CAE, CAT, and automated programming.

The speakers are:

Professor Robert Hong (Tutorial Coordinator) is Technical Advisor to Grumman's Director of Systems Engineering, and teaches graduate AI/Robotics courses at PINY. He is Chairman of AI/Robotics for Long island IEEE, and was a member of the AI Study Group for OSD/IDA.

Larry T. Wos, PhD, is a Senior Mathematician of Argonne National Laboratory. He is President of the Association of Automated Reasoning, and is co-author of the book entitled *Automatic Reasoning — Introduction and Applications*.

Diane Tosh is Supervisor of AI for Melpar, E-Systems. She is Chairman of AI/Robotics and Deputy Chairman of Computer Society for IEEE, Washington, DC.

Charles Bobelis is a Senior Engineer with Grumman Aerospace Corporation, participating in AI. He is Deputy Chairman of AI/Robotics for Long Island IEEE.

The FCC Closes In On Computer Manufacturers

More than any other federal agency, the Federal Communications Commission directly regulates all types of electronic data processing equipment. All such devices are regulated under Part 15 of its rules governing emission characteristics. This seminar will discuss these regulations and the means by which the FCC spots violators and how they go about enforcing the rules. One half of the seminar will also be dedicated to designing equipment for compliance at the printed circuit board level with a view towards complying at minimum cost.

Any devices that hook to the telephone network must also be registered under Part 68 of the FCC rules. The regulations and enforcement mechanisms are also reviewed. Methods for designing interfaces, including sample schematics, are presented and discussed.

The seminar speaker is Mr. Glen Dash who is a Director of Dash, Straus & Goodhue, Inc. and a partner of Mahn, Franklin & Goldenberg, PC. The organizers and coordinators of this seminar are Messers. Dash, Goodhue and Straus.

Speech Synthesis/Recognition

The use of speech as a communication interface between man and machine has been the goal of scientists since the advent of the computer age. Besides its novelty value in giving a machine human-like characteristics, it provides for more rapid communication between man and machine, while freeing the user's hands to perform other useful tasks. Recently, the area of speech synthesis has become quite well developed, with the capability to pronounce any word or phrase in a human-like manner. On the other hand, speech recognition, due to the inherent abstraction and complexity of language, has posed numerous problems. Nevertheless, much progress has been made in the area of speech recognition in the last few years. This tutorial aims to present a brief review of speech synthesis techniques and discuss in detail four major innovative applications of speech recognition systems.

The topics and speakers are:

THEORY AND APPLICATIONS OF COMPUTER SPEECH SYNTHESIS — John Cater, MCC Human Interface, Austin, TX

COMPUTER ARCHITECTURE FOR SPEECH RECOGNITION — Roberto Bisiani, Carnegie Mellon University, Pittsburgh, PA

LARGE-VOCABULARY ISOLATED WORD RECOGNITION AT IBM — Peter de Souza, IBM Watson Research Center, Yorktown Heights, NY

CONVERSATIONAL MODE SPEECH RECOGNITION SYSTEMS — Steve Levinson, Bell Laboratories, Murray Hill, NJ

SPEAKER VERIFICATION TECHNIQUES — Richard Mammone, Rutgers University, Piscataway, NJ (and moderator for this seminar), coordinator is George Hung, Rutgers University.

The Entrepreneur and the Venture Capitalist

Questions concerning venture, risk and buyout capital abound. If left unanswered, these questions will hinder the early development of high technology companies. The average engineer or scientist may not be familiar with business and financial procedures. This is not to their discredit since these procedures can become quite complex. Venture capital organizations assist young companies in solving these unique business problems. Besides capital investment, some organizations also provide business expertise and other financial resources to support portfolio companies through difficult periods.

This tutorial provides a setting for the entrepreneur and the venture capitalist to meet and exchange information. Specific topics will include: product viability, market research and market competition. Requirements for becoming a portfolio company will also be presented.

The panel moderator is Dr. Sotirios J. Vahaviolos, President of Physical Acoustics Corp., Princeton, NJ with James Whartenby of RCA Labs, Princeton, as coordinator.

Millimeter Wave Solid State Sources

"Millimeter Wave Solid State Sources" will be covered by Dr. Fred J. Rosenbaum of Central Microwave Co. at the March 11, 1985 meeting of the NJ MTT/AP Chapter.

About The Talk

Millimeter wave sources have improved in performance and increased in complexity over the past decade to meet the demands of current system requirements. This talk reviews the basic millimeter wave solid-state sources: Impatts, Gunns and Multipliers Application of these devices in dielectric resonator oscillators (DROs), voltage controlled oscillators (VCOs), injection locked oscillators (ILOs), and phase locked sources (PLOs) is described along with state-of-the-art performance results. Solid-state amplification at these frequencies will also be discussed.

About The Speaker

Fred J. Rosenbaum was born in Chicago, Illinois. He received his education in electrical engineering at the University of Illinois and in 1963 was awarded the PhD degree. He was a professor of electrical engineering at Washington University, in St. Louis, for 18 years before joining Central Microwave Company, a division of Alpha Industries. At the University he developed research programs in microwave components including ferrite phase shifters and circulators, Gunn oscillators and amplifiers, and FET devices and applications. As Chief Scientist at CMC he manages the R & D effort as well as the FET amplifier product lines.

Dr. Rosenbaum is a Fellow of the IEEE and a Centennial Medalist. He was editor of the IEEE Transactions on Microwave Theory and Techniques and served MTT-S as Ad Com President in 1981. He is the general chairman of the 1985-MTT-S International Microwave Symposium to be held in St. Louis, Missouri in June 1985.

Time: 7:45 PM, Monday, March 11, 1985. Place: ITT Avionics, Nutley, N.J. Pre-Meeting Dinner: 6 PM, Ramada Inn, Clifton, N.J. Dinner Reservations & Directions: Dick Snyder (201) 492-1207 or W. Schmidt (201) 284-2255.

New Development In Telephony: ISDN

On Wednesday, March 27, 1985, the New Jersey Computer Communications Chapter will have Thomas E. Browne of Bell Communications Research, Inc., speak on Integrated Services Digital Networks (ISDN).

About The Talk

Mr. Browne will discuss several aspects of ISDN telephone system planning in the United States and the factors that are motivating the present intense level of activity on this very important topic. ISDN is seen as the "target" architecture for the evolution of today's telephone networks to networks supporting a wide range of voice and non-voice services.

The talk will cover the technical principles that form the basis of ISDN, its many potential user services, the state of national and international standards development activities and some possible evolutionary patterns that may occur in the United States.

About The Speaker

Mr. Browne is Division Manager-ISDN Planning at Bell Communications Research, where he is responsible for defining the network architecture, development of

standards and assisting the Bell Operating Companies in planning ISDN field trials and early deployment programs. He has served as chairman of one of the CCITT working groups that defined the ISDN User-Access Protocol, and has been active in the activities of the T1D1 group sponsored by the Exchange Carriers Standards Association to adopt a US standard protocol for ISDN.

He was with Bell Labs for 18 years working on development of electronic switching systems. He joined AT&T in 1977, where he was engaged in switching systems engineering and exchange network technology planning. He assumed his current position in 1983. He received a Bachelor's degree from Manhattan College and a MSEE from New York University.

ALL WELCOME

IEEE membership is not required to attend. All are welcome! Refreshments will be served at the meeting.

Time: 8:00 PM, Wednesday, March 27, 1985. Place: ITT Tower Auditorium, 500 Washington Ave., Nutley, N.J. Directions and/or Dinner Reservations: George Parowski (201) 529-6141, George Pick (201) 884-6040.

LONG ISLAND CONTINUING EDUCATION INSTITUTE INC. "Career Growth Through Continuing Education"

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Fee: \$675 includes text, lecture notes and lunches. Group discounts available, please inquire.

CEU's: 2.0

EMS Objectives

The EMS is one of many technical societies/groups in IEEE. Its members may have different technical interests, however, they share a primary common interest in engineering management. The EMS objectives are scientific, literary, and educational in character and basically (1) strive for the advancement of the theory and practice of management of organizations with high engineering content and (2) maintenance of a high professional standing among its members.

- The purposes of EMS are:  
(a) Scientific and Educational with

specific emphasis on the management sciences and technology applicable to organizations engaged in or overseeing research, development, design, evaluation, production or operation of electrical or electronic equipment/systems or allied activities  
(b) Professional, directed toward the advancement of the standing of the members of the professions it serves.

The EMS Chapter activities are designed to help engineers making the transition to management, engineers endeavoring to prepare for future transition, and engineers who have made the transition and are seeking knowledge to help them improve their performance. The premise is that the transition to management re-

quires significant study and individual effort for success. The above mentioned activities should appeal to all IEEE members, regardless of their technical specialty areas of expertise.

The Chapter strives to give local EMS members an opportunity to interact with each other periodically and to host outside speakers on subjects of most interest to the members.

We welcome new and prospective members to join our EMS Chapter. For further information, please contact: M. Izaak, Chairman—EMS, Metro New York/North Jersey Chapter, NYPA - 10 Columbus Circle, New York, N.Y. 10019. (212) 397-7438.

PACE NEWS

Professional Activities Committee for Engineers

By R. Tax  
Committee Will Investigate

On February 6, The North Jersey Section’s Executive Committee agreed to establish an Ad Hoc Committee to investigate the Massachusetts High Technology Councils (MHTC) Report. The title of the report is “Assessment of Lifelong Learning Program Needs for Engineers and Scientists in Massachusetts High-Technology Companies.” The report is based on a study by two “Researchers” Paula G. Leventman, College of Engineering, and Glenn Pierce, Center for Applied Social Research, at Northeastern University and sponsored by the MHTC.

The purpose of the study “is to assess the extent and characteristics of education and training programs currently provided by Massachusetts High Technology Council member firms and to examine the future training needs of their workforce.” The introduction to the report apparently has very little to do with the current study. However, the introduction does belabor the point of engineer and scientist obsolescence based on studies and reports of others dated some fifteen (15) years ago during the lowest point of the high technology recruiting recession.

The function of the MHTC Report Investigating Committee is to evaluate the report and present its findings to the Section Executive Committee with recommendations for further action.

If the MHTC Report is anything like the AEA’s manpower study that predicted engineer shortages, then one of its functions will be to influence Congressional representatives into pouring more money into the engineering schools to turn out even more engineering degrees.

“Obsolescence At Age 33”

Dear PACE Editor,  
Like Rich Tax I was disgusted by the (opinion-less) report in The Institute on “Obsolescence at age 33”. But my interpretation of the message differs from his substantially. Without repeating what I said in an editorial (*Electronic Design*, January 10, 1985), here is the bottom line of my appraisal: This study constitutes the harshest condemnation of American engineering schools ever published. Under industry pressure they turn out instant computer fodder, not engineers.

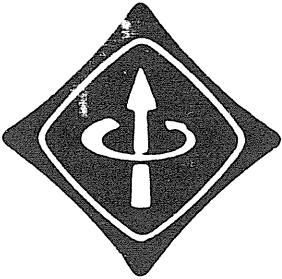
According to my contacts, physics, transmission line theory, even Maxwell’s equations were axed to make room for CMOS design--how else could the schools justify all those gleaming workstations? Trouble is, when XMOS replaces CMOS, those Wunderkinder will be obsolete again.

Instead of spending their limited cash on fancy equipment, not to mention skyscrapers, engineering schools would do well to pay their good teachers adequately. As it stands, they are either diluting themselves by moonlighting, or they seek the green pastures of industry. Who can blame them? Frankly, I think I got a better education in the bombed-out ruins of the Vienna Technical University than my son is getting in the Computer Cathedrals of CMU--and at about 1% the cost. (Not that MIT, Northwestern or Caltech are doing any better).

I am confident that, in my sixties, I can out-engineer just about any recent graduate, obsolescence or not. The reason is simple: An engineer who knows his physics, and knows how to learn, never becomes obsolete (and never has to cop out into management, as the Massachusetts report suggests).

Max Schindler, Boonton, N.J.

P.S.: Judging by what I hear, they don’t teach them anything about software either. That’s a shame, because it forces people to think very clearly if they want a computer to understand them. Just running canned programs adds absolutely nothing to a student’s qualifications.



Date: April 17, 1985

Time: 7 PM—RECEPTION  
8 PM—DINNER

Place: CHANTICLER, Millburn  
376-2222

Banquet Menu

- Reception — 7:00 PM  
Tart Shells Portuguese  
Stuffed Mushrooms Graham  
Broiled Chicken Livers Monticello  
Aubergine Supreme  
Pastries Hors d’Oeuvres Assorte  
Cantonese Egg Rolls - Sauce Anglaise  
Frankfurter Puffs  
Veal Souffles a la Oscar  
Danish Liver and Potato Souffles  
Quiche Lorraine  
Shrimps Soto Mayer - Sauce Romanoff  
Miniature Pizzas  
Baked Clams Crosettie  
Clams on Half Shell  
Oysters on Half Shell  
Veal Scallopini a la Tiberius  
Chicken Montmartre  
Petite Stuffed Cabbage - Hungarian Style  
Baked Stuffed Shells - Sauce Marinara  
Rice Pilaf  
Fresh Chinese Vegetables  
Baked Sugar Cured Ham  
Petite Party Breads  
Unlimited Cocktails  
Wine and Beer

- Dinner — 8.00 PM  
Salad Valencia  
Assorted Imported Cheeses Passed  
Imported Flat Breads  
Roast Prime Ribs of Beef - Sauce Naturele  
Stringbeans Almondine  
Glazed Belgian Carrots  
Potato Chanticleer  
Petite Dinner Rolls/Butter  
Coffee/Cream  
Chocolate Mousse  
(Liquor during and after dinner - individual responsibility)

SECTION BANQUET—APRIL 17, 1985

A time to relax, unwind and enjoy —  
A time to pay tribute to our New Fellows —  
A time to honor our new Senior Members —  
YES it’s time for the Annual Section Banquet

Following the enthusiastic response of those who attended the Banquet the past seven years, we are returning to the Chanticleer in Millburn. The affair is scheduled for Wednesday evening, April 17, 1985. Each ticket is \$22.00 and includes a complete prepaid Cocktail Hour preceeding dinner. Spouses and guests are welcome.

Reservations required by April 10, 1985. Complete the reservation form below and return it with your payment. If any additional information is required concerning the Banquet, contact Richard Tax at 573-0387.

Inquire about corporate tables.

Use this form for Banquet reservations enclosing a stamped self-addressed envelope. Reservations required by April 10, 1985. Mail reservation request to:

Richard F. Tax  
51 Hawthorne Ave.  
Park Ridge, N.J. 07656

Enclosed is \_\_\_\_\_ Please forward \_\_\_\_\_ tickets (make checks payable to North Jersey Section IEEE) to:

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

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

\_\_\_\_\_ Zip: \_\_\_\_\_

I would like to share a table (seating \_\_\_\_\_) with the following:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_