

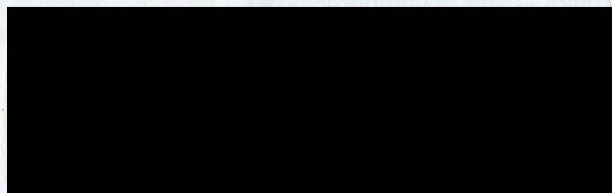


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TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations please call IEEE Office at (708) 963-3828 before the stated deadline

Copy Deadline for June SCANFAX is April 30, 1991

May 4 Saturday	Northwest Subsection	Tour of Fermi National Accelerator labs	Fermi Labs-High-Rise Bldg Batavia Rd Batavia, IL	Tour: 10 AM reservations are necessary
May 8 Wednesday	Power Engineering	Current Limiting Protector for systems through 38kV, 3000A	Carson Pirie Scott Monroe & Wabash Chicago (Corporate Level)	Social: 11:30 AM Lunch: 12:00 noon Meeting: 12:30 PM
May 14 Tuesday	Chicago Section	Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting: 7:15 PM
May 16 Thursday	Computer Society	The Next Generation Transputer	INTERACTIVE Systems 1901 N. Naper Blvd. Naperville, IL	Meeting: 8:00 PM
May 16 Thursday	EMC society	GTEM - Theory Practice and Demo	Motorola 1301 Algonquin Rd Schaumburg, IL	Social: 7:15 PM Meeting: 7:30 PM
May 20 Monday	Antennas and Propagation/ Microwave Theory	Low Cost Millimeter Wave Subsystems	Atrium Restaurant 3223 Algonquin Rd Rolling meadows, IL	Social: 5:30 Dinner: 6:30 PM Meeting: 7:30 PM
May 20 Monday	Communications Society	Officer Election & Code Excited Linear Prediction	Sharko's Restaurant 2225 Ogden Ave Lisle, IL	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM

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SCANFAX DEADLINES

ISSUE	COPY DUE	MAILED ON
JUNE	APR 30	MAY 15

**THIS IS A FIRM
DEADLINE FOR ADS
AND COPY!!!**



IEEE

SPEAKER: Mr. John Madden, National Sales Manager
G&W Electric Company

TOPIC: Current Limiting Protector for systems through 38kV, 3000A continuous current.

ABSTRACT: Increased load demands, substation retrofit or upgrade and the addition of on-site generation equipment are all very common causes of increases in the available fault current levels on distribution circuits. Consequently, fault current levels may end up exceeding the capabilities of the originally installed equipment.

BACKGROUND: Mr. Madden received his B.S.I.E. from the University of Illinois. He has over 10 years of sales and marketing experience in the electrical products industry. Mr. Madden is a member of IEEE and is actively involved in the Insulated Conductors Committee.

PLACE: Carson Pirie Scott - Chicago (Monroe and Wabash) - Corporate (lower) Level

DATE: May 8, 1991

TIME: 11:30 Social 12:00 Lunch 12:30 Presentation
Reservations must be made by noon Monday, May 6, 1991, by calling 708-963-3828. Please leave name(s) and company name. Lunch is \$9.00.

With the breakup of Ma Bell, the regrouping of corporate structures, and the untimely loss of others, two opportunities for personal career management have emerged. Some call this Just-In-Time Education, others say Literacy.

1. The opportunity to return to school to upgrade formal engineering discipline, or obtain some that were overlooked.
2. Take advantage of the availability of scholarly professionals. These are not the latter day entrepreneurial's Quality and Engineering \$700 a day courses whose material you probably obtained on the job, but rather the stuff you wish you knew was important five to twenty years ago when you were in the study mode.

Some examples are below or elsewhere in this issue. Others will come to mind, so please tell us! The Section Membership Services is considering obtaining these services under the umbrella of services other than where to get an application form.

Please look over the matrix. Write out a 3 letter code group for each selection of those that interest you now or for your next job; phone the code grouping or groupings in to 708 576 8222 or 708 885 4189. Leave your name and phone number if you wish. You may also "fax" your response to 708 576 8221.

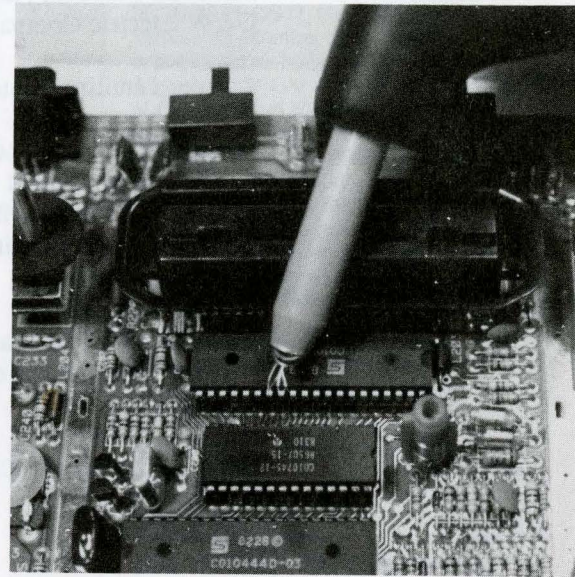
CODE FOR LOCATION		CODE FOR COST	CODE FOR TOPIC
A	GALVIN CENTER	L \$40	P FRACTURE MECHANICS OF SOLDER JOINTS
B	HARPER COLLEGE	M 50	Q FRACTURE MECHANICS OF HYBRIDS
C	AT&T NAPERVILLE	N 80	R FRACTURE MECHANICS OF PRINTED CKTS
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G	LAKE COUNTY		V TOTAL QUALITY COST CONTROLS
H	ELGIN COMMUNITY		W MEANINGFUL GRAPHICS
I	CITY OF CHICAGO		X EXEMPLARY STATISTICS
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K	OTHER		Z MODELS TO SOLVE SUPPLIER PROBLEMS

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The Chicago Chapter of the IEEE Computer Society
invite you and your friends to our May Meeting

TOPIC: The Next Generation Transputer
SPEAKER: Ed Barrett
Senior Applications Engineer, SGS-Thomson
DATE: Thursday, May 16, 1991
PLACE: INTERACTIVE Systems Corporation, 1901 N. Naper Boulevard, Naperville, IL
[west side, immediately north of the Naperville Road Exit of I-88]
TIME: 8:00 PM
RESERVATIONS: Please call IEEE Office at (708) 963-3828 before 5/13/91 (to let us plan for enough chairs)

ABSTRACT

The Transputer™ system architecture is unique in providing hardware support for process scheduling and specific instructions for interprocess communications. As the computational loads on the embedded processors increase, the ability to produce scalable multiprocessor systems is crucial. Mr. Barrett will help us explore the architecture of this high-performance, pipelined, superscalar processor which has a peak performance greater than 150 Mips and 20 Mflops.

ABOUT OUR SPEAKER

Ed has a BS from Midwest College of Engineering (now part of IIT-West) and is a Senior Member of IEEE. He has been an active member of IEEE's Chicago Section Executive Committees for many years and was its Chairman for 1987/88.

Please call Joe Feitler at INTERACTIVE (708-505-9100, x277) for more information or travel directions.

IEEE MEETING NOTICE

CHICAGO CHAPTER - IEEE EMC SOCIETY

DATE: THURSDAY - MAY 16, 1991
Refreshments 7:15 P.M.
Meeting 7:30 P.M.
LOCATION: MOTOROLA
1301 ALGONQUIN ROAD
SCHAUMBURG, IL
SPEAKER: EDWIN BRONAUGH - EMCO
TOPIC: "GTEM - THEORY - PRACTICE AND DEMO"

The GTEM is a modified TEM cell allowing operation far beyond the cut off frequency normally encountered by standard TEM cells. After Mr. Bronaugh's presentation, members of the Motorola staff will discuss the hands on use of the cell followed by a demonstration of the use of the cell using one of Roger Swanberg's boards. We will continue to see how the board performs, this time by seeing a live demonstration using the GTEM. This will be a well attended meeting and we ask you to please in for a reservation by May 13 so seating and refreshments can be planned.

RESERVATIONS & DIRECTIONS: CALL IEEE OFFICE 708-963-3828

OUR SECTION IS 13 SOCIETIES, 2 SUB-SECTIONS AND OVER 7000 MEMBERS. Technical meeting coordination is linked via the Program Committee.

MEMBERS - We all serve your needs, wants and desires. Programs are organized based on your participation.

Chicago area product topics are diverse. Application concentrations are Communications, Computers, Power and Transportation. Two other areas which can be added to our offerings are Foods and Pharmaceuticals.

Contact Chairpersons to provide your input, ideas and comments.

Antennas/Microwave Theory	Chuck Clark	708-259-9600
Communications	Vijay Garg	708-713-7220
Components, Hybrids, Mfg Tech	Praveen Gupta	708-231-3142
Computer	John North	708-510-4692
Electron Devices	Carl Kannewurf	708-491-8163
EMC	Don Sweeney	708-699-9060
Eng in Medicine & Biology	C V Hayes	708-655-0550
Eng Management & Prof Communication	Joseph Feitler	708-505-9100x277
Ind Appl/Ind Electronics	John Kovacik	708-272-8800
Laser & Electro-Optics	David Naylor	312-996-6010
Nuclear and Plasma Sciences	Bob Camillone for Mary Scott	708-339-8600
Power Engineering	Eric Mortenson	312-294-2798
Reliability	Dan Glab	708-520-4405
Fox Valley Sub-Section	Sam Kelley	708-323-7826
Northwest Sub-Section	Howard Myers	815-459-0100

Plans are progressing for a NEW society - POWER ELECTRONICS. Also, format has commenced for a new sub-section. Approximate boundaries are Rt 47, Rt 17, Indiana Line and US 20-155-Rt 126. Call with name ideas!!

Programs Bob Camillone 708-339-8600

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ON NEW CHICAGO SECTION CHAPTERS

INVITATION to the members of the following IEEE Societies:

- 227 Consumer Electronics Society
- 214 Circuits and Systems Society
- 130 Vehicular Technology Society
- 127 Robotics Society
- 106 Power Electronics Society

The Chicago Section has no active chapters for the above IEEE societies' members. If you are interested in petitioning for a Chicago Section chapter, please contact Jack Sherman, (708)576-8222; leave your name, your phone number and IEEE membership number. Members of other societies whose Chicagoland membership numbers less than 100, e.g., Instrumentation, Education, Social Implications of Technology, Dielectrics, etc., your input is needed as well.

Our Section leads the way in "reaching out" to our unemployed members by arranging for another Workshop conducted by Lendman-Payne in the O'Hare area. According to a late report, over ninety people attended on a beautiful Sunday (April 7th).

A big "thank-you" to our volunteers who have made this event and the Job Fair following in the next two days of April a great success.

If you missed this opportunity, plan for our next Job Fair event in June '91.

JOB ASSISTANCE WORKSHOP PLANNED FOR FALL '91

In our Section's continuing efforts to make "Professional Activities" more meaningful to the majority of our members, our PACE Committee has scheduled another Training Session on "job seeking". Many engineers whom their employers recruited upon graduation from college have never experienced the shock of being unemployed. However, for those who have, it is indeed a traumatic situation. They tend to reevaluate their "self worth" when they find prospective employers who are no longer eagerly rushing to hire them.

The employment market has changed in recent years; although certain engineering skills are still in high demand, the majority of unemployed engineers have to learn how to sell themselves and their skills to prospective employers. This IEEE workshop will provide training on writing resumes, preparing cover letters, "networking skills", and proper interviewing techniques. Even though this training will not guarantee a position, it will generate a positive attitude, unleash an engineer's innate "problem solving ability", and help them adapt their skills inventory to the changing market place for new and experienced engineers.

Look for more details on the Job Seeking Skills Seminar in the September 1991 issue of SCANFAX.

Northwest Subsection

TOUR OF FERMI NATIONAL LABORATORY

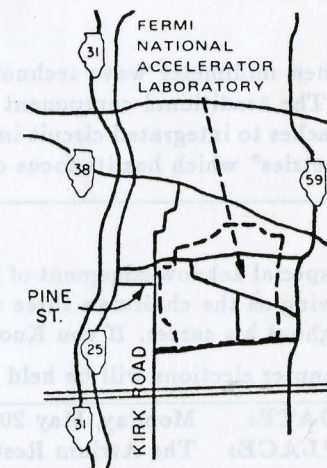
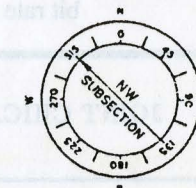
Northwest Subsection invites you to a tour of FERMILAB (formally known as the Fermi National Accelerator Laboratory) on Batavia Road in Batavia, IL.

The two hour tour is limited to 40 people.

Place: Meet in the lobby of the 15 story "high rise" building on Batavia Road
Date: Saturday, May 4, 1991
Time: 10:00 AM

Travel Directions: Take Route 59 to Batavia Road. Proceed west on Batavia Road to the high rise building. Ample parking is available around the building. Enter via steps (at the national flags) leading from the two lagoons.

For reservations and additional information contact the IEEE Message Center (708) 963 3828. Because of security Fermilab needs a list of prospective visitors before April 20. Visitors must be at least 16 years old.



Meeting of the IEEE Communications Society (Chicago Chapter)

DATE: Monday May 20, 1991

GUEST SPEAKER: Rafid Sukkar, Ph.D.

AGENDA:

- Election of Chapter officers
- Technical Presentation: Code Excited Linear Prediction (CELP)

PLACE: Sharko's Restaurant, 2225 Ogden Avenue, Lisle, IL

TIME/COST: Social: 6:00 PM - Cash Bar

Dinner: 7:00 PM - \$13.00

Speaker: 8:00 PM - FREE

RESERVATIONS: Call (708) 963-3828 to make dinner reservations by Thursday, May 16, 1991.

FURTHER INQUIRIES: For further questions, contact Paul Bhugra at (708) 979-1901.

ABOUT THE TOPIC: Code Excited Linear Prediction (CELP) offers a powerful method for encoding speech signals at low bit rates, ranging from 4800 bits/s to 16000 bits/s. At 8000 bits/s, near toll quality speech using CELP is a reality, making CELP a viable method for many telecommunication applications where bandwidth is premium. In many of these applications, the speech coding algorithm must be robust in the presence of channel errors. Past CELP research efforts focused mainly on improving the speech quality and minimizing the computational complexity. Recently, more attention has been directed toward the robustness of the algorithm in the presence of channel errors. The talk will present a CELP system with a source-dependent channel encoding scheme. This source-dependent channel encoding method takes into account the statistics of the various CELP parameters in normal speech and minimizes an acoustically meaningful error criterion to determine the optimal bit configurations for the transmitted parameters.

ABOUT THE SPEAKER: Rafid Sukkar received the B.S.E.E and M.S.E.E. degrees from the Illinois Institute of Technology in 1982 and 1984, respectively, and the Ph.D. degree in Electrical Engineering in 1987, also from IIT. In October 1990, Dr. Sukkar joined AT&T Bell Laboratories, Naperville, Illinois, as a Member of the Technical Staff. He is currently conducting research and development in the areas of automatic speech recognition and speech coding. >From 1988 to 1990, Dr. Sukkar was a senior research associate employed by IIT to conduct research funded by AT&T Bell Laboratories. His work during this period involved employing neural networks for speech processing applications and channel coding for low bit rate speech.

JOINT CHICAGO CHAPTER OF IEEE ANTENNAS AND PROPAGATION SOCIETY AND MICROWAVE THEORY AND TECHNIQUES SOCIETY

MAY 1991 MEETING NOTICE

Low Cost Millimeter Wave Subsystems

PRESENTED BY
ROBERT KNOX

EPSILON LAMBDA ELECTRONICS

When millimeter wave technology is finally applied to system applications, the subsystems must be very low cost. The traditional component oriented approach typically used in the microwave range is too costly. Various approaches to integrated circuit implementation have been proposed. This paper will cover an approach called "fiber millimetrics" which has its focus on cost reduction through unique circuit and manufacturing methods.

OTHER ACTIVITIES

A special acknowledgement of Robert Hargis's effort and dedication to the Chapter will be presented. In addition to serving as the chairman three times, Bob has been involved in many Chapter, symposium and section activities throughout his career. If you know Bob, please come out to show your appreciation.

Chapter elections will be held at this meeting.

DATE: Monday, May 20, 1991

PLACE: The Atrium Restaurant 1st exit north of I90 off Rt.53
3223 Algonquin Road 1/4 mile east on Rt.62
Rolling Meadows, Ill. Algonquin Road

TIME: Social 5:30 PM Dinner 6:30 PM Meeting - 7:30 PM

Please make your reservations by noon on Friday, May 17, by calling (708) 963-3828. A reservation is required, even if you plan to attend the meeting only. The dinner cost is \$22.00. Non-IEEE members are welcome.