

SCAN FAX

October 2005

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— Chicago Section —



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DeVry DuPage, Room TBA, 1221 N. Swift Rd., Addison, IL

No Registration Needed

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Energizing engineers to take charge of their careers

Career planning is how to survive downsizing and offshoring

By Paul Zukowski

Last year an estimated 80,000 U.S. programming jobs moved offshore, according to Forrester Research Inc. That number could go as high as 180,000 within five years, and for the jobs that remain here the pay has gone down 15% since 2002 for basic programmers, who number about 1 million in the U.S.

The global pressure is on for all types of electrical engineering work, of course, and it's time for anyone in the field to assess the vulnerability of their job to outsourcing and offshoring. That's why the Chicago Section of IEEE has put together a conference on career planning for

November 12 (see details in this issue).

One engineer who knows the uncertainties of jobs these days is Bill Nartker, who is helping to line up speakers and energize the conference.

"I was laid off a couple of years ago at Tellabs when their product line crashed for a while," said Nartker. He admits he didn't see it coming and thought he was doing really well with the company. "But when things got bad, it didn't matter. If you were in the wrong job at the wrong time, you were out the door."

The sudden chance was an eye-opener for Nartker. He realized he had been basing his career on Tellabs rather than on his

own needs. "My mindset was wrong; I needed to make my own career. So when I heard about this career event from John Zulaski, vice chair of the Chicago Section, I thought I could really do this and help people understand the difference between what a career was and just going about trying to do a good job for your company."

The career planning conference will have a keynote speaker who will talk about the jobs of tomorrow and where things are going in the future, and then go into two subtracks, said Nartker. "One is career planning if you want to take a traditional job, and the other track is for those who

continued on page 4...



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- CE Mark has become part of 510K Process and prescribes the following tests: EN 61000-4-2, -3, -4, -5, -6, -8, -11 plus EN 61000-3-2, -3, Mil Std 461 RE101 and RS101
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want to be more entrepreneurial, the things to think about if you want to own your own business," he said.

"I've worked with engineers and was one for 20 years, and we're not very good networkers, so we're going to get some networking tips out there. We've got to get engineers interested again in engineering, but in different ways. You can't find a job anymore where you can program for eight hours and go home, your C+ programming jobs are overseas. So we want them to find better jobs and more current jobs so they can still provide value and being an engineer still means something."

The keynote speaker will be Mike Wynne, who shared some of his themes with Scanfax.

"The gist of the message is the routine stuff is about to go away, because that's the stuff they can do very easily anyplace else than the United States," said Wynne. "So make sure you are involved in things that go beyond the routine."

"The other thing is, there is no such thing as job security, and there never was. It was an illusion and it was kept up by both sides, by employees and employers. But it was never really true, and that was proved as soon as hard times came, because they started downsizing."

Wynne will also explain how the global economy operates and puts tremendous competitive pressures on businesses, which forces them to focus on reducing costs. "The engineering jobs are going to the countries where they are the least expensive, and you would expect that to happen with services just as it has with raw materials and components and anything else," he said.

Finally, Wynne said he would drive home the point that engineers today can't be just job oriented, they have to be career oriented.

"Not only do you have to be career oriented, but you have to be in control of your career path. You can't wait patiently

for someone else to do things for you," he said.

"The worst thing you can do is think of yourself as a victim. Is it unfair? Maybe. But nobody said life was fair. So those are not happy messages, but they are facts that we need to understand."

"The happy message is, you can control your career. You do have the last word; you can walk away if things don't work out right."

"There is a tremendous amount of opportunity out there right now, but you can't be doing the same things you were. I think that's probably the most important message," Wynne said.

Nartker concluded, "We thought that if we did a good job the company would take care of us, but that's not really true anymore. You've got to take care of yourself, and we're trying to get this word out to the engineers to get them to be more responsible for their career, more in control of it." ■

Employment Opportunities

Apertio is the world leader in open software mobility solutions for the telecom industry. We are revolutionizing the market for the evolution of core network systems, management subscriber growth, new service deployment, and the migration to IP mobility networks. With growth of over 400% last year, we are looking for enthusiastic, energetic individuals to contribute to our ongoing expansion and development.

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Experience with GSM core network infrastructure (HL, HSS, Prepaid, MSCs, CAMEL SCPs, and Short Message Service Centers) in mobile networks and experienced with IP Multimedia Systems.

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Experience in testing and deploying core network infrastructure such as HLR's, SMSCs, Prepaid or Voicemail into mobile networks, with strong preference toward experience with GSM mobile environments.

Systematic, precise and well organized working style within a "hands-on" team environment.

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Project Managers are responsible for planning, coordinating and monitoring the implementation of software products and services to our customers according to project life-cycle deadlines.

Project management experience in leading core network software and system integration projects either working for a supplier or with mobile network operators.

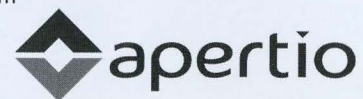
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Excellent supervisory, planning, interpersonal and leadership skills.

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Evening Meeting

IEEE EMC Society
Chicago Chapter

IEEE International Symposium on EMC 2005 in Review

Tuesday,
September 20, 2005

About the Topic:

A review of the recent EMC Symposium in Chicago using an open forum format. The EMC2005 committee members will be on hand to present their take on the Chicago event that was held at Navy Pier. Lead by Tom Braxton, the committee was bound and determined to make the 2005 Symposium the best ever.

Learn about the demonstrations, technical papers, New Product Showcase, Interactive EMC Forum, volunteers, logistics, and the overall feeling on how the EMC2005 Symposium went off.

The entire fall schedule for IEEE Chapter meetings will be presented as well.

Meeting Location:

DLS Electronic Systems
1250 Peterson Drive
Wheeling, IL 60090
847-537-6400

Time:

Refreshments 6:30 to 7:00 p.m.
Presentation 7:00 to 9:00 p.m.

Directions:

www.dlsemc.com

Lunch Meeting

Chicago Chapter of the IEEE Power Engineering Society

Arc Resistant versus Arc Extinguishing Metal Clad Medium Voltage Switchgear

Wednesday, October 12, 2005

Dave Temple and Joe Joyce
Square D

About the Topic:

The protection of personnel and facilities from the hazards of electrical arc flash has become an important issue for utilities, and large industrial or commercial users of electrical power. Square D will briefly discuss the causes of Arc Flash, the codes and standards that apply, and two popular solutions to this Medium Voltage Switchgear Arc Flash issue. The traditional approach might be called a "withstand" approach. Build the gear to withstand the effects of internal arcing. A more recently developed approach is pro-active. This approach minimizes the effects of arcing by extinguishing the arc quickly, therefore minimizing the damage done to the gear by the arc. The presentation will compare and contrast these approaches.

About the Speakers:

Dave Temple manages the Medium Voltage Switchgear Marketing Department for Square D in Nashville TN and has many years with Square D specializing in Medium Voltage Switchgear applications and product development. Joe Joyce has been involved in the selection and application of circuit protection systems for Square D since graduating from Purdue University in 1972 with a BSEE. He is a member of the IEEE PES and IAS.

Meeting Location:

Chicago Bar Association, 321 South Plymouth Court, Chicago, IL (near the intersection of Jackson and Dearborn).

Time:

11:30 Social
12:00 Lunch (optional)
12:00 Presentation
1:00 Adjourn

Reservations:

Lunch tickets can be purchased in the lobby bookstore (\$12.00). Please call the IEEE Business Office by noon on Monday 10 Oct 2005 at (630) 493-4333 or (800) 898-IEEE to make your reservation.

Continuing Education:

IEEE technical meetings may be acceptable as continuing education where required for maintenance of professional engineering licensure. Refer to the individual state's requirements for details.

Information:

For more information, please visit the Chicago Chapter IEEE PES web site:
<http://peschicago.org>

Evening Meeting

IEEE – IAS Dinner Presentation

Tour of GE Zenith Manufacturing Facility, Chicago, IL

Wednesday, October 19, 2005

Thomas Duffy
Vice President of Sales
GE Zenith Controls/GE ACT

About the Topic:

Paralleling switchgear with its control options, utility requirements for interconnections and mission-critical protection, UL 1558 and UL 891 comparison, intricacies of the microprocessor and SCADA system make this topic of particular interest to electrical engineering community.

GE Zenith with its rich history on power distribution equipment and its applications offers a dinner meeting on this interesting topic. Paralleling switchgear and generator protection will be discussed followed by a factory tour, where you'll have an over view of manufacturing of paralleling switchgear and its related accessories.

About the Speakers:

Thomas Duffy, Vice President of Sales for GE Zenith Controls/GE ACT has been in the power systems business for over 17 years. While with GE Zenith Controls, he has advanced his career from Sales Engineer to National Sales Manager to his current position. Prior to his service with GE Zenith Controls, Tom was the District Engineer Sales Manager in Dallas, TX with Caterpillar, Inc. Tom has instructed at several EGSA training courses throughout the years. After attending Iowa State

University and earning his E.E., Tom obtained his M.B.A. from Bradley University in Illinois in 1990. One of Tom's greater achievements is the role of husband and father of three children.

Location:

GE Zenith Manufacturing
830 West 40th Street
Chicago, IL 60609
Phone: 773 299-6600
Fax: 773 247-7805

Time:

5:00 p.m. Social Hour
5:30 p.m. Dinner & Presentation
7:00 p.m. Tour

Reservations:

Please call the IEEE Business Office at (800) 898-IEEE or (630) 493-4333 with your reservation. Please note any special meal requests at the time of the reservation. You can also make your reservations on line at www.iaschicago.com

Continuing Education:

For P.E. licenses that require continuing education for renewal, attendance at IEEE Technical Meetings is acceptable as one Professional Development Hour (PDH) per meeting.

Directions:

From the Kennedy and Dan Ryan Expressways (90/94): Just south of down-

town, stay in the local (right) lanes and exit at 35th Street (Exit 55A). Trucks should exit at 39th street (Pershing Rd.) for better elevation clearance.

Turn west on 35th to Halsted. Turn left on Halsted, proceed south until you pass under a viaduct. At the first set of lights, beyond the viaduct, (Exchange), turn right. Proceed one block and turn right on Peoria Street, proceed one block and then turn right on 40th Street. We are the last building on the left side of the street.

From the Stevenson Expressway (I-55): Exit at Ashland Avenue. Turn right (south) on Ashland. Proceed on Ashland for 1 mile to Pershing Road (3900 South), making sure to stay in the right lane (do not use overpass). Turn left (east) from beneath the overpass onto Pershing. Proceed on Pershing and turn right on Morgan. Turn left at the first intersection, which is 40th Street. We are the last building on the left side of the street.

Note: If there is a train on Morgan, you may want to proceed further east on Pershing to Halsted (next light). Turn right; proceed south on Halsted under the viaduct to the first light (Exchange) and turn right. Proceed one block and turn right on Peoria Street, proceed one block and then turn right on 40th Street. We are the last building on the left side of the street.

Gary Fenical
Laird Technologies

About the Topic:

Advances in electronic equipment are occurring at a rapid pace. At the same time tough EMC compliance regulations, new laws regarding product waste, higher mechanical reliability requirements, as well as cost cutting pressures are driving electronics packaging engineers to find new and innovative EMC shielding solutions. This presentation will cover key advancements in shielding technology available today and related developments on the horizon.

Just about every class of shielding product has seen noteworthy changes. Foam-based products, such as Ultra-Soft Sculpted Fabric-Over-Foam offer a high degree of compression set performance with increased shielding over the life of the gasket.

Conductive foams have been developed for low compression load deflection (CLD), lower closure force, while delivering X, Y, and Z axis conductivity for improved high-frequency shielding. This makes conductive foam an ideal EMI shielding material in vertical compression and low cross-shear applications

Conventional shielding and RF gasketing materials no longer meet the performance requirements of today's electronics. Miniaturization and ever increasing frequencies have contributed to the need for change. Electrically conductive elastomers which can be produced in extremely small profiles can be deposited onto small substrates; they are fast becoming the answer to the miniaturization dilemma.

The need to reduce costs but not performance, while at the same time increasing geometric complexity, has led to the development of much more versatile and higher performance EMI products. Metal-Mold in

Evening Meeting

IEEE EMC Society Chicago Chapter

Advancements in RF Shielding Materials

Thursday, October 20, 2005

Place (MIP) and Rotary Form in Place (FIP) provide small intricate gaskets, unique geometries, minimal footprint, and excellent shielding. Frameless vent panels greatly improve cooling capability with no reduction in shielding while providing a more robust cost effective solution.

About the Speakers:

Mr. Gary Fenical is a well recognized name in the field of shielding materials. Gary is the EMC technical support engineer for Laird Technologies (Delaware Water Gap, PA) and is a NARTE-certified EMC and ESD engineer.

Location:

Elite Electronic Engineering
1516 Centre Circle
Downers Grove, IL 60515
Phone: 630-495-9770

Time:

6:30 p.m. Social Hour
7:00 p.m. Meeting Start

RSVP:

Steve Laya (Elite Electronic Engineering)
Phone: 630-495-9770 x119

Information:

www.ewh.ieee.org/soc/emcs/chicago/

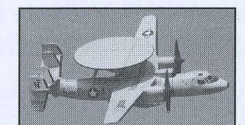
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Symposium

IEEE Chicago, Computer Society Chapter

16th IEEE International Symposium on Software Reliability Engineering ISSRE 2005

November 8-11, 2005

About the Topic:

ISSRE focuses on the theory and practice of Software Reliability Engineering (SRE). The conference scope includes techniques and practices to (1) verify and validate software, (2) estimate and predict its dependability, and (3) make it more tolerant/robust to faults. Over the years, the conference has grown steadily, attracting about 200 participants on a regular basis. The conference is big enough to represent major topics in software reliability engineering, but small enough to provide an in-depth representation of theory or practice in these areas. Industry participation has also increased over time, leading to a healthy mixture of theory and practice.

About the Speakers:

Highlights of the conference include keynotes by Elaine Weyuker and Norm

Schneidewind and a tutorial by John Musa. Twenty presentations about advanced and effective application of SRE will be made on the industry day. Thirty presentations about cutting-edge SRE research will be made on the research days. Six co-located and related workshops will be held. The conference banquet will include fine dining at the Intercontinental Hotel www.chicago.intercontinental.com with live 'improv comedy by the Galileo players www.galileoplayers.com

Location:

U of Chicago
Gleacher center
450 North Cityfront Plaza, Dr.
Chicago, Illinois 60611
www.gleachercenter.com

Registration:

www.123signup.com/register?id=fbvyz

Information:

www.issre.org or
<http://rachel.utdallas.edu/issre/>

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IEEE Chicago Membership Development Notes

Greetings,

In subsequent ScanFax issues we will publish items we hope will stimulate your interest in who we are and what you can to help us grow. The present membership dues rate of \$10 a month is a contribution to the availability of your fellow members at chapter meetings and groups with specialized affinities.

The population dynamics charts are a way for you to consider the members in your areas, both your areas of space and areas of career management. Your individual data are never released to sales and marketing agents.

Several of the society chapters are in need for volunteers to promote meetings, their location and time slots, present technical material, and provide networking opportunities. The Affinity Groups, Women in Engineering (WIE), Consultants Network, Life Members, and GOLD - Graduates Of The Last Decade, and

an IEEE Standards discussion have been established and open to your voices and ideas for membership activities, personal career management, and business development.

Your comments and suggestions are important. We cannot sustain without you, so please share your thoughts with us. The established email accounts are: General email is at ieechi@yahoo.com, WIE is at wiechicago@yahoo.com, Standards is at ieechistds@yahoo.com. Chat groups are in planning stages.

If you do not have email access and want to send a card, please use my home address- 1395 Highland Blvd. Hoffman Estates IL 61095.

Cheers, Jack Sherman • IEEE Chicago, Chair,
Membership Development j.sherman@ieee.org

Day Meeting

IEEE Chicago Section

Career Planning for a Changing World

Saturday, November 12, 2005

Saturday, November 12, 2005, 8:30am to 2:30 pm

Embassy Suites Hotel Chicago-O'Hare- Rosemont, Illinois

Meeting Location:

Embassy Suites Hotel Chicago-O'Hare Rosemont

5500 North River Road, Rosemont, IL 60018-5230 just one mile from Chicago's O'Hare International Airport, across the street from the Donald E. Stephens Convention Center and only twelve miles from downtown Chicago

Cost: members \$75, non-members \$95, & students \$40 - lunch included

Program:

Preparing for the jobs of tomorrow 8:30 to 10:00 am
Keynote

The world economy is improving at the expense of the US economy. US companies are taking advantage of lower labor rates in India, China and Russia to subcontract routine engineering activities. How can we, as engineers protect our careers against off shoring?

This will provide you with:

- "What jobs have gone overseas and what types of jobs are not likely to return?"
- "What can you offer that the competition (overseas) cannot?"
- "What types of jobs are increasing?"
- "What types of jobs probably won't be eliminated?"
- "What is your best move going forward?"

Speaker - Michael Wynne

Michael Wynne is President of International Management Consulting Associates. For over 20 years he has helped companies build and grow profitable operations in the US and other countries around the world.

During his corporate career, Mike was president of a multimillion dollar Mobil Oil subsidiary with responsibility for several countries. Later, as Strategic Planning Manager with Mobil Chemical Company he developed global plans and strategies for a \$2 billion operation.

In addition to his consulting and coaching activities, Mike is frequently asked to address business audiences in the US and abroad. He has spoken to thousands of business people in 19 countries. He is also invited regularly as a guest lecturer at Northwestern University's Kellogg Graduate School of Management,

Break 10:00 TO 10:15 am

TRACK 1 - Enhancing Your Career

Career Planning 10:15 to 11:45 am

Changes in the world economy have caused companies to change their hiring philosophies. Gone are the days of lifetime employment. Each individual must take control of his/her career. This seminar will provide you the information to ...

- Take responsible for your career (Don't wait for others to do it for you.)
- Develop goals for your own self-development
- Separate your job from your career
- Become a continuous learner
- Provide tips on how to become a good networker

Speaker - Kenneth Kuchar - Scherer, Schneider, and Paulick (SSP)

Lunch 11:45 to 12:15 pm

Marketing your ideas 12:15 to 1:30 pm

Communicating with non-technical people

To become a good leader, you must be able to get information across to many levels and various backgrounds of people. This presentation will help you understand the following:

- How to understand what my audience is looking for.
- How to clarify for myself what I want.
- How to deliver the message effectively.
- How to ensure the message has been understood.

Speakers - Linda Jansak and Judy Rosenberg - Chicago Chapter of STC

Effective Technical Presentations 1:30 to 2:30 pm

As an engineers career progresses, presentation skills are essential. You must be effective at selling ideas, helping others to see your point of view & seeking assistance. This presentation will help you understand:

- How to get your idea across in a clear and concise manner.
- How to use visual aids effectively.

Speaker - Hugh Dunbar - Toastmasters International

TRACK 2 - Changing Careers

From Corporate to Entrepreneur 10:15 to 11:45 am

Starting your own business sounds like a lot of fun. But what are the pitfalls you might encounter?

continued on page 10...

- What things do you need to think about before jumping in?
- How to prepare a business case?
- How to handle the, I'm either looking for work or working cycle.
- How do I manage risk?

Speakers - Bret Johnson and Jeff Coney - Northwestern University

Lunch 11:45 to 12:15 pm

Protecting Your Intellectual Property 12:15 to 1:30 pm

The better your idea, the more likely it will draw the attention of your competitors. How can you communicate ideas with customers, suppliers, financiers, etc without giving away the store? This presentation will guide you as to how to protect your intellectual property.

- How to speak about your idea.

- What is a confidentiality agreement?
- What about patents and copyrights?
- Can I publish a technical paper and still retain rights?

Speaker - Martin Faier, Faier & Faier P.C.

Time/Goal Management 1:30 to 2:30 pm (Managing your start-up)

Time is a precious resource that cannot be replenished. Things you should learn:

- What is time management assessment?
- What are time wasters?
- What are time savers?
- How to set practical goals?
- How to prioritize and focus on the high payoff activities

Speaker - TBA

For more information call: 1-800-898-IEEE

Career Planning for a Changing World Registration

Meeting Location: Embassy Suites Hotel Chicago-O'Hare Rosemont
5500 North River Road, Rosemont, IL 60018-5230

Date: Saturday, November 12, 2005 Time: 8:30 a.m. - 2:30 p.m.

Cost: IEEE members \$75, non-members \$95, students \$40

Fax or mail this form with payment to: IEEE, 4513 LINCOLN AVENUE, SUITE 213, LISLE, IL 60532-1290 USA; FAX: (630-241-0142)

Name: _____ Title: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Circle your preference: Track 1 or Track 2 (Space is limited so register early)

For more information call: 1-800-898-IEEE

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Card Number: _____

Exp. Date: _____

Signature: _____

For more information call: 1-800-898-IEEE

Save the Date

IEEE Chicago/Rockford Consultants' Network • A Joint Affinity Group of the IEEE Chicago and Rock River Valley Sections

The IEEE Alliance of Consultants Networks (AICN) Meeting and Workshop

Saturday, December 3, 2005

About the Topic:

The IEEE Chicago/Rockford Consultants' Network is pleased to be hosting the 2005 AICN Meeting and Workshop on Saturday, December 03, 2005. This workshop will be a valuable aid to both practicing and first-time consultants, and for potential consultants.

Details:

Location, topics, speakers, etc. will be provided in the next issue of SCANFAX.

For up-to-the-minute details as they are developed, please visit the IEEE Chicago/Rockford Consultants' Network web site at:
www.drblank.com/coaction.htm

Information:

Local e-mail points of contact are:
JAuerConsulting@worldnet.att.net or
consultnet@bmillerengineering.com

Professional AND Business Directory

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