



THE

SUNCOAST



IEEE SIGNAL

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Dinner and Software Design

Learning Standards, Learning Objects: XML and the Struggle for Electronic Learning Standards

Sponsored by Computer Society Chapter

Date/Time: Tuesday, July 16, 2002, 6:15 PM to 8:15 PM

Location: Jimmy Mac's Waterfront Restaurant
5000 W. Gandy Blvd., Tampa (phone: 813-839-3449)
Famous "Hamburger Bar" - Specialty hamburgers, fries and cold drink \$9.50 plus tax and tip. This is an open meeting. Non members and students are welcome.

RSVP: Dennis Trask at d.trask@ieee.org 727-773-4685

John M. Bunch will present an overview of XML and the struggle for learning standards. Converging on a learning standard? AICC, IMS, LRN, SCORM, LMS, what the heck? Imagine a general surgeon in a rural western town who needs to perform a life-saving procedure performed only once before by a leading heart specialist in Boston? If the heart specialist can create learning objects, or discrete chunks of procedural and content knowledge in a reusable, multi-platform, multi-delivery format, and make this available to the rural surgeon just-in-time, perhaps a life can be saved. Or a custom curriculum quickly and inexpensively assembled for computer technicians, or college undergraduates, or corporate sales people, or disadvantaged youth. This presentation discusses the technology behind the idea and the growing industry of online learning.

Speaker:

John graduated from the University of North Carolina in 1988. He received his MA from Appalachian State University in 1991. John is presently working toward a Ph.D. in Instructional Technology at the University of South Florida and is a consultant to training organizations on the use of instructional technology and curriculum design. John is an owner and former Vice President of a training firm where he developed eLearning strategy and software developer curricula. John also taught a variety of Microsoft official curriculum courses in the subject areas of MS SQL Server 2000, Visual Basic .Net, and Windows 2000 and provided training consultation for programming and software development. John can be reached at jbunch@cyberspeech.com

Directions to Jimmy Mac's Waterfront Restaurant:

S. Bridge Street is on the Tampa side of the Gandy Bridge, off of Gandy Blvd. between Westshore Blvd. and the bridge. From Gandy Blvd., turn south at the Imperial Yacht Center / Tampa Bay Marina sign onto S. Bridge Street. Go south on S. Bridge St. for 1/10th mile just past W. Paul Avenue. Jimmy Mac's is on the right.

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All material for THE SUNCOAST SIGNAL is due by the Friday following the 1st Thursday of the month preceding the issue month. Address all correspondence to:

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Chair's Comment

By Quang Tang

Thanks to Ralph Painter, IEEE member with Tampa Electric for donating a grant of \$1000 to the Section. Grant was awarded by IEEE Education Activities Board for Ralph's participation in the 10 weeks session of CCNY grant program.

Last issue of the Signal, I have asked members to let us know whether we should continue with both electronics and hardcopy of our monthly newsletter, The Signal. The responses were very low but majority of comments were in favor of electronics version only. I am so delight to see many guest members attending Executive Committee meetings recently. We appreciate your comments and suggestions very much. If you have not been to one, please come and join us. We usually meet on the evening of first Tuesday of the month at Tampa Electric Company, downtown Tampa. Our next Executive Committee meeting is scheduled on July 9th.

Magnetics Conference in Tampa

The 47th Annual Conference on Magnetism and Magnetic Materials, to be held November 11-16, 2002 at the Tampa Marriott Waterside. The conference is co-sponsored by the IEEE Magnetics Society and the American Institute of Physics.

Check out the conference website at www.magnetism.org for more details. Sessions on microwave materials and magnetization dynamics in this conference may be of some interest to MTT/AP/ED Chapter.

For further conference information, check out the above website or email Mr. Bob McMichael at rnmcmichael@nist.gov or call (301) 975-5121 or fax (301) 975-4553.

2002 IEEE-USA Pre-College Education 'Best Competition'

The IEEE-USA Pre-college Education Committee (PEC) has launched its sixth annual competition to identify outstanding pre-college education activities conducted in U.S. IEEE Sections (Regions 1-6). The 2002 PEC Best Competition identifies and recognizes volunteer efforts to enhance the teaching of K-12 math, science, and technology and gives these efforts visibility so that other IEEE sections can emulate them. Three projects will be selected for recognition, based upon three criteria: transferability, innovation and effectiveness. For more information and to enter your Section's pre-college activity, visit: <http://www.ieeeusa.org/committees/PEC/2002comp.html>

Tour of Ohio Transformer Facility

Sponsored by PES/IAS Chapter

- Date/Time:** Wednesday, July 10, 2002, Noon
- Speakers:** Mr. Juan Luis Thierry, Shell Form Engineering Manager
Mr. Javier Arteaga, Core Form Engineering Manager
- Location:** 2001 US 301 Hwy N., Palmetto, Florida
- RSVP:** Ghaff Khazami at GKhazami@seminole-electric.com
or call 813-739-1221
- Cost:** Members \$10; Non-Members \$20; Students \$5

Ohio Transformer is an S.D. Myers company with over 50 years dedication to the transformer industry. During this tour you will find a complete and state of the art transformer re-manufacturing and testing facility. This facility is the world largest transformer re-manufacturing plant. The main customers are the power utilities and they repair/re-manufacture shell form and core form transformers up to 1000 MVA units and 500 KV System. In this tour we will learn more about the steps and procedures to re-manufacture large and small power transformers.

Take I-75 south to Palmetto exit turn right on US 301, after about one mile you will see the plant on your left.

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2002 Review Seminars

For PE Electrical and EIT/FE October 25 & 26 Examinations

Review seminars for the PE (Electrical) and Engineer In Training / Fundamentals of Engineering (EIT/FE) exams will be held:

Mondays, July 29 thru October 7 for the EIT/FE Exam (No class Labor Day September 2) & Thursdays, August 1 thru October 3 for the EE Exam.

Seminars are conducted from 7-10 P.M. (Monday or Thursday) for ten weeks. The registration fee is \$300 and includes text. The seminars will be held on the main USF campus in Tampa.

To register, contact: Alan M. Keith, P.E., PO Box 14042, (EC37), St Pete, FL 33733.

Alan.M.Keith@pgnmail.com

Phone (727) 384-7937, FAX (727) 384-7994
Pinellas Chapter, Florida Engineering Society

Brain Teaser Challenge Column

By Butch Shadwell

June BTC Solution

In last month's musical BTC, you were asked to calculate the doppler shift generated by a Leslie speaker system. Doppler shift is caused by the apparent speed of a sound source with respect to, either toward or away from, the receiver. In our problem the Leslie horn was 24 inches long giving a circumference of motion of 6.28 feet. Since the horn rotated at 2 Hertz, the tangential velocity was 12.56 feet per second. The greatest apparent speed of the emitter to the receiver would be at the tangent points of the rotation pattern. Doppler shift is calculate as the speed of sound ($V_s=1100$ ft/sec) plus the apparent speed (V_a), divided by the speed of sound. On opposite sides of the circle of rotation of the emitter, the apparent speed is either positive or negative, i.e. - either toward or away from the observer. So $F_s=F_o((V_s+V_a)/V_s)$ and $F_s=F_o((V_s-V_a)/V_s)$. The answer to the May BTC is that the range of frequencies perceived by the listener for a 1 kHz signal is 988.6 to 1011.4 Hertz?

July BTC

One of my fellow EEs has been bending my ear about his new theory of nutrition. I suppose I can't blame him. It seems everybody has their own theory on the best way to feed oneself. The unique feature of my friend's diet is that he claims the perfect human food is toast. White bread toast at that. I have to admit that his weight loss on the toast diet has been phenomenal, but one little side effect has been the need to supplement your intake with regular blood transfusions.

Well, this fellow with the toast diet, had his toaster stop working. It turns out he needed a new line cord. Before he replaced the cord he decided to check in his electrical engineering handbook to see the current carrying capacity of the wire he would use. He was a little surprised to see that copper wire of a given gauge without insulation was rated at a different current capacity than insulated wire. The question for the readers is, which wire has the greater current rating and why?

Questions or comments to the Brain Teaser Challenge, please contact Butch Shadwell at 904-223-4465 (voice), 904-223-4510 (fax), b.shadwell@ieee.org (email), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. <http://www.se.mediaone.net/~butchs/>

Educational Activities Digest

By Lynn Murison

Outreach Administrator, IEEE Educational Activities

Phone: (732) 562-6526 or email www.ieee.org/organizations/eab/

Accreditation Evaluators Needed

Contribute to the engineering professional and public good. The IEEE Educational Activities Board seeks engineering professionals from industry, government, and academe to serve as program evaluators for accrediting engineering and engineering technology programs at U.S. universities. Nominations for the five-year term starting 2003 will be accepted through 31 October 2002.

Information packages, including the application and nomination forms, will be available on the web as of 15 June 2002, at www.ieee.org/organizations/eab/apc/ceaa/engapplication.htm (engineering programs) and www.ieee.org/organizations/eab/apc/ctaa/techapplication.htm (engineering technology programs). Get a flavor of what it's like to be an evaluator by reading comments from a first-time evaluator at www.ieee.org/organizations/eab/apc/news5.htm. For more program information, contact <eab-accred@ieee.org>.

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is the world's largest technical professional society, serving the interests of more than 375,000 members in the information and electrotechnology communities in approximately 150 countries. The Educational Activities Board (EAB) of the IEEE recommends educational policy to the IEEE Board of Directors, and coordinates the Institute's educational activities, programs, and products.

July 2002 Calendar of Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 <i>Independence Day</i>	5	6
7	8	9 <i>EXCOM at TECO Plaza 5:30pm-7:30pm Guest are always Welcome!</i>	10 <i>PES/IAS Meeting – Tour Of Ohio Transformer Facility at Noon</i>	11	12	13
14	15	16 <i>Computer Chapter Meeting Dinner and Software Design 6:15pm-8:15pm</i>	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

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