

THE REPORTER

Journal of the Central Indiana Section • The Institute of Electrical and Electronics Engineers, Inc.

PACE activity, Friday April 29, 6 pm
Chairman: Jose' Ramos

I am pleased to announce that April's PACE activity will be a Seminar by Prof. Jonathan Mills of the Computer Science Department, IU Bloomington. He will talk about his research in [Extended Analog Computing](#) (EAC). He and his students are doing exciting work in analog computing, and in digital/analog hybrids. His analog computations are extremely fast and his machines are relatively simple



For example, his EAC can solve second-order differential equations in femto-seconds to nano-seconds. There are many potential applications, including video rendering and network traffic optimization. Professor Mills invented and has done extensive work on the Stiquito Robots and he has several books on the subject. Stiquito, a small, inexpensive hexapod (six-legged) robot. Universities, high schools, and hobbyist have used Stiquito since 1992. Stiquito's use nitinol to provide a "muscle-like" reaction to mimic biological actions

The seminar will be at 6 p.m. on Friday, April 29. There may be a dinner after this meeting. Check the [CIS-IEEE](#) website for updates.

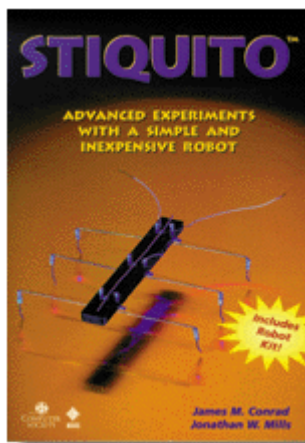
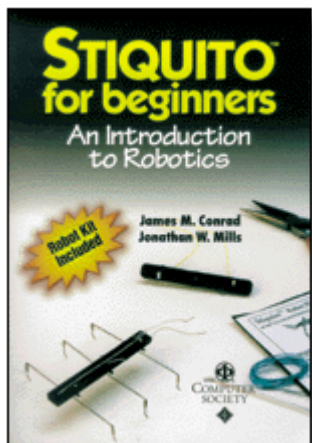


EX-COM Meeting April 28, 2005
CIS Executive Committee

The IEEE CIS Executive Operating Committee meetings are held on the fourth Thursday of every month. at 6:00 pm in room ET-209 on the [IUPUI campus](#) at 799 W. Michigan Street, Indianapolis, IN 46202. This meeting is open to all members. Pizza is typically served, so if you plan to attend, please let us know so we can order enough pizza. The agenda is listed below:

Agenda

- I. Approval of Previous Meeting Minutes
- II. Treasurer's Report
- III. Secretary's Report
- IV. Chairperson's Report
- V. Vice-Chairman's Report
- VI. PACE
- VII. Student Chapters
- VIII. Chapters/Affinity Groups Reports
 - A. Computer Society
 - B. Power Engineering
 - C. Engineering in Medicine & Biology
 - D. Signal Processing
 - E. CIECN
- IX. Committee Reports
 - A. Senior Member Rodeo
 - B. Newsletter
- X. Old Business
- XI. New Business
- XII. Next meeting: TBD
- XIII. Adjourn



Meeting Calendar on last page

MAY 2005						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Central Indiana Section Active Volunteers

Chairman Jose Ramos	(317) 274-0044 jaramos@iupui.edu
Vice Chair John Kassebaum	(317)293-1242 John.Kassebaum@ieee.org
Secretary Tom Bishop	(317)306-2677 tnbishop@ieee.org
Treasurer Bill Lin	(317)278-4559 lin@enr.iupui.edu
Director Alan Stillerman	(317)263-8888 astiller@ihets.org
Director Ken Reid	(317)263-6366 reid@ieee.org
Power Engineering/Industry Applications Society Dick Hildreth	dhildreth@cityofanderson.com (745)648-6589
Computer Society Dan Allison	(317)808-4221 dallison@ieee.org
Signal Processing Society Ilya Pollak	ipollak@ecn.purdue.edu
Engineering in Medicine and Biology Society Ed Berbari	eberbari@iupui.edu
Central Indiana Engineering Consultant's Network Will Kassebaum	Will.Kassebaum@ieee.org (317)299-0557
John Kassebaum	John.Kassebaum@ieee.org (317)293-1242
Membership Development Earl Hill	eshill@loma-consulting.com
Professional Activities Al Razban	(317)879-1561 al.razban@roche.com
Student Activities	Open Position
Constitution and Bylaws Ken Reid	(317)274-2362 reid@ieee.org
Newsletter Editors Shelly Born Duane Mattern	(317)838-2717 s.born@ieee.org d.mattern@ieee.org

Central Indiana Section Active Volunteers (cont'd)

Webmaster Bob Evanich	(317)838-2268 b.evanich@ieee.org
Communications Information Officer Pam May	(317)274-2363 may2@tech.iupui.edu
Historian Marv Needler	(317)274-2362 needler@ieee.org

Section Sponsored Entities

UPUI Student Branch CIS-IEEE representatives
Jose Ramos & Ken Reid

ITT Student Branch CIS-IEEE representative
Open Position

Rose-Hulman Institute of Technology Student Branch
CIS-IEEE representative Ed Wheeler,

Purdue University Student Branch
CIS-IEEE representative Open Position

Editorial Policy: Each issue of The Reporter references three months - the month in which it is published and the following two months. Single sheet flyers are published occasionally when The Reporter is not published. These announce the monthly meetings. The Reporter is not published in May, June, July, and August because there are generally not any meetings held during the summer months.

Material to be included should be submitted mid-month prior to the month it is to be published. For example, material intended for the September issue should be submitted to the Information Coordinator by August 15. Material received after 2 weeks in advance of the publication month may be included on a space available basis, or only entered on the web page email distribution. The Communications Information Coordinator will send a reminder to all IEEE Central Indiana Section entities by the 15th of the month to submit their monthly updates. If no update is received for that month, only the mission statement and contact information will be published for that entity.

Copy should be submitted electronically, or typewritten and either double or triple spaced. If necessary, a legible handwritten copy is welcome. Photographs are most desirable and may be submitted in electronic format or color, black-and-white glossy, or Polaroid. Please note that black-and-white photographs reproduce best. Advertisements are welcome. Contact the editor for layout sizes and rates.



ExCom members attend Annual PACE Conference

The IEEE-USA annual Professional Activities Committees for Engineers (PACE) conference was held in Tucson, AZ on March 11-13, 2005. The conference was attended by John Kassebaum (Vice-Chair), Will Kassebaum (CIECN), Ken Reid (Director CIS and Chair, IEEE-USA Pre-college Education Committee) and Alan Stillerman (Director). Jose Ramos (Chair) encountered travel difficulties and was not able to attend and Al Razban (PACE Chair) was on out of country for his job.

The conference was held at the Double Tree Hotel in Tucson. Friday night started it off with a reception dinner and welcome speech by Kristi Hummel, Chair, 2005 IEEE-USA Leadership Workshop and Gerald A. Alphonse, President, IEEE-USA. Attendees also heard IEEE President Elect Candidate Statements from Leah Jamieson & Gerald Peterson. After dinner each of the regions held a breakout session with their region PACE representative.

Saturday started with a panel discussion moderated by IEEE-USA President, Gerald A. Alphonse. The panelists were, Ron Hira, Vice-President Career Activities, Gregg Vaughn, Vice-President Member Activities, Jean Easton, Vice-President Professional Activities and Russell Lefevre, Vice-President Technology Policy Activities. The panelists talked about their initiatives for their committees and also took questions from the audience.

The keynote speaker was Erna Grasz, Vice President of Research & Development, Nellcor Products/Tyco Healthcare & Nation S-PAC Speaker. Her talk was titled, Leadership: It Happens at Every Level.

The rest of Saturday was then broken into three tracks, Government Relations, Employment & Career Services and Internal/External Communications. All attendees were rotated through the tracks. Later in the afternoon there were four workshops, which were repeated, given on Employment & Careers, Government Relations, Local Programs and Leadership Skills. Attendees were able to choose two.

Saturday ended with an awards banquet and afterglow reception.

Sunday started with breakout sessions for each region. Each region was asked to come up with two or three items that they wanted IEEE-USA to work on and incorporate into the structure of IEEE-USA. This was followed by a general wrap-up recommendations session by Gerard Alphonse. The conference ended by 10:00 a.m.

Alan Stillerman said, "This was my third time attending, actually fourth if I include the one in 2000. While some of the topics are the same from year to year, the content is different enough that makes it worth attending. The conference provides the section with the opportunity to meet other PACE representatives from around the country as well as meeting the top brass of IEEE-USA. Some of the topics that I found most interesting were on: H1-B Visas and offshoring, How to contact your congressperson, Job hunting and career information and leadership".

IEEE Computer Society

Chairman: Dan Allison

Past Meeting Monday, April 18 2005

Next Evolution in Database Technology and Structure

John Layden, CEO, Time Compression Strategies, Inc. (TCS)

Dave Layden, CTO, Temporal Dynamics, Inc. (TDI)

Database technology has migrated from punch cards to tape to disk over several decades. But some of the artifacts in the design of relational databases is a holdover from the earlier technologies, and has prevented the final migration to computer memory. John Layden discussed the history of memory resident databases, and how the newest technology in this field, the Ancelus DBMS, has broken the code on how to merge the two concepts. Ancelus is the latest in the series of memory resident databases, originally developed by Dave Layden in the 1980s. This design breaks entirely with relational theory, and leaves all elements of relational implementation structure behind. Mainstream applications can now take advantage of memory resident performance with dramatic results. The architecture of Ancelus supports the most complex applications (temporal, sequential, and threaded data sets) with ease. It further supports true 24x7x365xforever operation without special requirements in either the application code or database administration.

Past Meeting Monday March 7, 2005

Dot Net Nuke for Web Site Development

Speaker: Tim Sherrill

Tim Sherrill is a software supervisor for Beckman Coulter, Inc. with experience in software development, databases, and web-based technology. Tim's DotNetNuke intranet website has been running for more than a year and includes both simple and complex extensions to the technology. Tim Sherrill gave a tutorial of Dot Net Nuke. [DotNetNuke](#) makes web development accessible to users without a strong technical background. This ASP.Net (Microsoft) web application with its database back end allows a user to publish content by creating pages which contain predefined modules, such as an image gallery, RSS reader, fill-in forms, survey, discussion module, etc. With the integrated security features, each user will only see the content appropriate for his/her role.

Power Engineering/Industry Applications Society (PES/IAS)

Chairman: Dick Hildreth



PES Student Awards Banquet

The Power Engineering Society of the Central Indiana Section of the IEEE held its annual banquet to recognize outstanding students at the universities in the CIS-IEEE region. The dinner was held at the Indianapolis Power & Light facilities on Morris Street in Indianapolis, and was attended by the officers and many members of the PES. In addition to the dinner and awards presentations, the banquet included a talk by Mr. John Klingler of Lewellyn Technologies. Mr. Klingler spoke of his career in the electrical engineering field, and covered his many experiences in different parts of the electric industry (mostly coal mining operations) and his travels across the US and the world. Mr. Klingler provided sage advice to the students on the value of taking opportunities when they are presented, and how that has enriched his life and that of his family. Mr. Klingler now provides training courses for a wide variety of companies through Lewellyn Technologies.

Dr. Fred Brockhurst, Scholarship Committee Chairman, formerly of Rose-Hulman Institute, presented the Student Awards. The following students were recognized:

Outstanding Senior Power Engineering Student

Rose-Hulman:	Kevin Patel
IUPUI - EET:	Lucas Barber
Purdue – EET:	Deral D. Danis

Outstanding Power Engineering Project

Rose-Hulman:	Cesar Carbajal
" "	Sanga Coulibaly
" "	Jared Dinkelaker
" "	Michael Fleck
" "	Andrew Gast
" "	Aalap Jha
" "	Kevin Patel
" "	Sara Podolski
IUPUI - EET:	Jason Roberts
Purdue – EET:	Deral D. Danis

Outstanding Junior Power Engineering Student

Rose-Hulman:	David Mumaw
IUPUI - EET:	Christopher Gilmet
Purdue – EET:	Jonathan Shestak

The evening was considered a great success by all who attended. The PES would like to thank IPL for providing the facilities and the dinner.



Mr. John Klingler



Student Awardees

Dr. Fred Brockhurst, Scholarship Committee Chairman, formerly of Rose-Hulman Institute, presented the Student Awards.



Kevin Patel (Rose-Hulman)



Lucas Barber (IUPUI – EET)



David Mumaw (Rose-Hulman)



Christopher Gilmet (IUPUI – EET)



Jonathan Shestak (Purdue – EET)



Deral D. Danis (Purdue – EET)

Past Meeting Spring 2005 Short Course Communications for Utility and Industrial Equipment

The course was structured to provide introductory information on communication systems and protocols. The following topics were covered: Communication Fundamentals and Protocols, Monitoring and Control of Low Voltage Equipment, Packet Data and Digital Communications / Wireless Methods, Cell Phone Applications for RTU and Metering.

Central Indiana Engineering Consultants' Network (CIECN)

Co- Chairmen: John Kassebaum and William Kassebaum

Next Meeting Thursday May 5, 2005

The next meeting will be held on Thursday May 5, 2005. There will be an optional dinner networking opportunity from 5:15 PM to 6:30 PM to those who RSVP. The meeting is from 6:45-9:00pm in the Training Room at the Ritchie Automation Building at 7225 Georgetown Road. See <http://www.indy-engineer.net/> for map to the meeting. The speaker this week is Mike Williams, on the topic, "Selling The Unseen". This presentation is about landing consulting work. There are sales and networking mechanisms that work, and those that don't. We'll expose both and help you get more business that fits your area of expertise.

CIECN Future Meeting Topics

- June Standard Contract Workshop - discussions about business contracts
- July - Stan Trout on Sales and Marketing for Engineering Consultants
- August - Cris Halter of Halter Ferguson Financial on Financial Planning

Past Meeting Thursday April 7, 2005

This meeting was held in the Training Room at the Ritchie Automation Building at 7225 Georgetown Road. Karen Stein-Ferguson gave an overview of her new computer forensics business, [Digital Data Forensics, LLC](#). Karen graduated from Purdue University with a BS in mathematics and graduated with honors from Indiana University earning an MBA. Ms. Stein-Ferguson worked for a number of years in industry as a systems analyst, business engineer, partner in a software development firm, and other executive management roles. Ms. Stein-Ferguson earned her law degree from Indiana University School of Law in Indianapolis and was admitted to the Indiana Bar in 1994. She accomplished this milestone while working fulltime as the Chief Information Officer at Indianapolis' largest law firm. Ms. Stein-Ferguson has added computer forensics to her skill set which compliments all her experiences and background perfectly.

This meeting sponsored a special roundtable discussion about the successes that members have had and about problems that member are having in their businesses. The roundtable then offered possible solutions to the discussed problems. The group will use commonly discussed issues as a topic for future presentations.

Past Meeting Thursday March 3, 2005

This meeting was held in the main Auditorium of the Nursing Building on the IUPUI Campus. The featured Speakers were Scott Willis and Debra Taylor of Creative Performance Solutions. They spoke on Client Acquisition Methods. Scott Willis designed the Client Acquisition Methods course to teach non-selling professionals the simple but highly effective methods that have worked for him. If you need to build clients and land business but sales is not your first profession then his course will be a great experience. Scott has 12 years of sales management experience and over 20 years of actual in the field in front of the customer experiences. He has held positions as Vice President of Sales, Director of Sales, National Accounts Manager, Key Account Manager, and Territory Manager. He has been successful for companies like Reebok, Sara Lee, Block's Department Store, Lowell Shoe, and Kenra, LLC. His responsibilities have included sales, product development, marketing, business development, category management, international sourcing, and people management.

Designing to meet Military and RTCA EMC Standards

Seminar/Workshop specifically for Mil Std 461 & 464 and RTCA DO-160

July 21-22 & 25-26, 2005 Northbrook, IL

Taught by

**Elya B. Joffe, IEEE EMC Distinguished Lecturer and
Jack Prawica, Manager of D.L.S. EMC testing laboratory**

**Coordinated by Donald L. Sweeney
President, D.L.S. Electronic Systems, Inc.**

For more information call 847-537-6400 or
go to www.dlsemc.com and click on Military and RTCA Seminar

Class Description

Introducing for the first-time, a four-day seminar explaining Military and RTCA Standards, how they are tested to and how to design to meet them. The seminar will cover: the basics of EMC/EMI; Mil Std 461 & 464 and RTCA DO-160 Standards; product design to meet the requirements; details on the tests and how they are performed. When you leave this seminar, you should be ready to lead a design team with a high degree of confidence that your products will meet EMC/EMI requirements Mil Std 461 and 464 and RTCA DO-160.

Instructors



Elya B. Joffe, VP of Engineering at K.T.M. Project Engineering, Kfar-Sava, Israel, is an IEEE EMC Distinguished Lecturer and a member of the Board of Directors of the IEEE EMC Society. He has over 20 years experience in government and industry in EMCE³ and electronic systems and platforms, specializing in aircraft and aerospace. He is actively involved in the EMC design of commercial and defense systems, from circuits to full platforms, working in various fields such as NEMP and lightning protection design and numerical modeling for solution of EMC problems.



Jack Prawica is the manager of the EMC testing laboratories for D.L.S. Electronic Systems, Inc. in Wheeling, IL. In his 13 years of EMC testing and problem solving experience, he has developed test procedures, dealt with the daily hands-on testing operations, and solved many EMC/EMI problems.

Donald L. Sweeney is coordinating this program and has offered classes in the Chicago area to over 2000 engineers during the past 20 years. The class is sponsored by D.L.S. Electronic Systems Inc., Wheeling, IL, home of one of the largest Mil Std 461 and RTCA testing laboratories in the world.

Meeting Calendar

Date	Host	Subject	Location
April 26	Tech Point	Indiana Entrepreneur Bootcamp Presented by Ball State and Anderson Universities	
April, 28 - 6pm	CIS-IEEE	▽ Executive Committee Monthly Meeting	IUPUI, ET-209
April 30, Sat	CINLUG	Linux Boot Camp	
May 4 - 7pm	CINLUG	▽ Central Indiana Linux Users Group	EDS
May 5 -6:45pm	CIECN	▽ Central Indian Engineer's Consulting Network	see website
May 7, Sat	CINLUG	Linux Boot Camp	
Mar. 7 -6pm			
May 5 7-9:30am	Tech Point	Motor Sports Initiative in Indiana	Conference Center 11 S. Meridian St. Informatics Bldg IUPUI
May 10, 4:30-6pm	Tech Point	▽ Tech Tuesday sponsored by IQuest	
May 20 8-5pm	PMI CIC	Microsoft Project Tips, Tricks, & Traps	
May 25 8-4pm	Purdue	Summit IV: Advancing Manufacturing in Indiana	Purdue Univ. IUPUI, ET-209
May 26 - 6pm	CIS - IEEE	▽ Executive Committee Monthly Meeting	
June 1, 7pm	CINLUG	▽ Central Indiana Linux Users Group	EDS
June 2, 6:45pm	CIECN	▽ Central Indian Engineer's Consulting Network	see website
June 4, Sat.	CIS-IEEE	Senior Member Rodeo	IUPUI
June 6-9	Sensors	Sensors Expo & Conference, McCormick Place	Chicago, IL
June 23 - 6pm	CIS - IEEE	▽ Executive Committee Monthly Meeting	IUPUI, ET-209
July 21-22 & July 25-26	DLSEMC	Designing to meet Military and RTCA EMC Standards	Northbrook, IL
August 21 2pm Sunday	CIS IEEE	Souvenir Sunday - Indians Lunchbox , Indianapolis Indiana Baseball game versus the Scranton Red Barons (<i>Philadelphia Phillies</i>)	Victory Field
October 24-26		Magnetics 2005: Advancement in Magnetic Applications, Technology & Materials Electrical Insulation Conference/ Electrical Manufacturing Expo	Indianapolis Convention Center & Marriott Indianapolis Downtown
May 7-13, 2006	Intel	Intel International Science and Engineering Fair	



Check the [Section web page](#) for current information.

▽ - indicates a reoccurring monthly meeting.

Distribution: The Reporter is distributed to approximately 1700 IEEE members within the Central Indiana Section including student members and faculty of Purdue, IUPUI, and Rose-Hulman. The Reporter may be selectively distributed to non-members when it serves the aims of the Section. Examples include public, industrial, and school libraries, and other engineering societies and professional organizations. Inquiries for complimentary subscriptions should be made to the Editor.

THE REPORTER

CIS-IEEE

c/o Shelly R. Born
1000 East Main St.
Plainfield, IN 46168