NEWSLETTER

Volume 49-11

November 2005

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Local Conferences

6th International Workshop on Microprocessor Test & Verification (MTV 2005) in Austin, TX November 2-4, 2005

2005 IEEE International Test Conference (ITC). This conference will be held 08 Nov - 10 Nov 2005 at the Austin Convention Center in Austin, TX. Conference website: http://www.itctestweek.org/


2006 Region 5 Technical, Professional & Student Conference - Call for Papers: http://
4. Local Conferences

- Conferences affected by hurricanes Katrina and Rita

5. Presentations of Interest

2005:

- 6th Int'l Workshop on Microprocessor Test and Verification
- IEEE Int'l Test Conference
- 2nd San Antonio Biophotonics Symposium

2006:

- IEEE Region 5 Technical, Professional and Student Conference
- World Congress on Information Technology

1. Section Activities

Chairman's Column

Section officer elections

The term of office for the current set of Section officers expires in December of this year (the bylaws were altered in 2003 to make our term of office two years). The election will take place in December. A Nominating Committee was formed (chaired by Dawn Roberson), and recommends the following slate of officers to the membership for their consideration.

- Pres: Clif Denny
- Vice Chair - San Antonio: Garrett Polhamus
- Vice Chair - Austin: Sherry Gillespie
- Secretary: Oscar Moreira-Tamayo
- Treasurer: T. Scott Adkinson

A brief bio and society involvement will be collected from each of these and forwarded to the membership. If any member wants to nominate themselves (or another IEEE member), please contact the Nominating Committee Chair at robersondj@ieee.org.

CTS Forming Chapters

Life Members in the Austin-San Antonio Texas area are organizing a Life Member Chapter. Some Life Members have already been contacted to determine interest. If you have not been contacted do have an interest in the formation of a Life Member Chapter in the Central Texas Section, please forward your name, mailing address and e-mail address to:

Edwin L. Bronaugh (LF)
10210 Prism Dr.
Austin, TX 78726-1364
ed.bronaugh@ieee.org

Women in Engineering - San Antonio

Title: Reasoning with MAD Distributed Systems
Speaker: Lorenzo Alvisi, Associate Professor
Affiliation: UT Austin
When: Nov. 18, 2:00-3:30PM
Where: BSB 3.03.02
RSVP: none required (open to public)

Title: Software Watermarking: State of the Art and Future Directions
Speaker: Christian S. Collberg, Assistant Professor
Affiliation: University of Arizona
When: Nov. 4, 2:00-3:30PM
Where: BSB 3.03.02
RSVP: none required (open to public)

Title: TBA
Speaker: Wenke Lee, Associate Professor

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If you are interested in participating in a Women in Engineering in San Antonio, please send an email to Mercy Luhanga (mluhanga@hotmail.com).

Systems, Man, and Cybernetics
Interested in participating in a CTS Chapter of the System, Man, and Cybernetic (SMC) society? If so, please contact Peter Chen (SMCS) Philip.Chen@utsa.edu.

EWeek Activities
We are in the initial stage of planning for Austin EWeek activities. Teachers from area schools can register for visits by engineers by going to the Central Texas Engineers Week web site, http://www.centexeweek.org. Likewise, if you want to volunteer to visit a school, you can sign up on this site as well. Training sessions for new volunteers will be scheduled in the coming months. To facilitate the participation of area companies, a Community Kick-off event is being planned.

The intent of this event is to educate the executives of local companies to the activities of EWeek, and how companies can participate. This event is targeted at the HR and Engineering VPs from area companies. If you would like to see your company invited to this event, please send the appropriate contact information to me at John.Purvis@ieee.org.

As always, we look to you for feedback. If you have any question or comments, please contact me at John.Purvis@ieee.org.

John Purvis
Central Texas Section Chair

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Team Web page: http://w3.austin.ibm.com/:/projects/lvkb/risc/

Continuing Education

Software Project Management Certificate Program (online or onsite) • ongoing

PE Exam Review
Test Masters’ review course and workshops in San Antonio, TX for the April 2006 Electrical Principles and Practice Exam
Texas engineers that have inquired about the Test Masters’ Electrical PE prep course have come to the realization traveling to Houston is inevitable. That is until now. The course has been offered in other cities in the past. I am currently in the process of trying to recruit electrical engineers willing to commit to taking the course and workshops in San Antonio for the April 2006 Principles and Practice exam. Anyone willing to commit to both the course and workshops, please contact me (Dana Cutter) at DCutter@CPSEnergy.com

Student Branches
2. Chapter Activities

Multiple Chapters

Computer Society - San Antonio and Women in Engineering - San Antonio

Topic or Presentation Title: Computers in Fiction: Can we do the AI?
Speaker: Dr. Carol Luckhardt Redfield
Date and Time: Tuesday, November 8, 2005
   6:30 p.m. - Networking; 7:00 p.m. - Dinner; 8:00 p.m. - Program
Cost: $10 members/ $2 students/$13 non-members
Reservations: Required by Friday, Nov 4, 2005, to Yu Zhang, yzhang@cs.trinity.edu or (210) 999-7399.
Meeting Location: Skyline Room, Coates Center, Trinity University, San Antonio, TX.
Directions: Please note that we have parking instructions on the Web site. The Alamo Stadium parking is reserved for Alamo Stadium Event parking.
Please check out the instructions at http://www.ieee-cs-cts.org/meeting_details.htm for the parking by Laurie Auditorium.
Abstract: Computers have been in fictional stories for a long time, and have appeared as intelligent agents or even characters in fiction since at least the mid-1900s. This presentation will review some science fiction movies and novels with smart computers either as a tool or as a character in the stories such as HAL from the movie 2001, Data in the Star Trek TV series and movies, and C3PO in the Star Wars movies. Each story will be compared to the current capabilities in the field of artificial intelligence.

Joint Signal Processing/Communications Society [for more information]

Topic or Presentation Title:
Speaker:
Date and Time:
Cost:
Reservations:
Meeting Location:
Directions:

Joint Circuits and Systems/Solid-State Circuits

Topic or Presentation Title:
Abstract: Computers have been in fictional stories for a long time, and have appeared as intelligent agents or even characters in fiction since at least the mid-1900s. This presentation will review some science fiction movies and novels with smart computers either as a tool or as a character in the stories such as HAL from the movie 2001, Data in the Star Trek TV series and movies, and C3PO in the Star Wars movies. Each story will be compared to the current capabilities in the field of artificial intelligence.

Electromagnetic Compatibility Society [for more information]

**Topic or Presentation Title:**

**Speaker:**

**Date and Time:**

**Cost:**

**Reservations:**

**Meeting Location:**

**Directions:**

For more information, see the EMC website (above).

IEEE EMC Symposium Coming Back to Austin!

For the first time since 1997, the IEEE EMC Symposium will be returning to the Central Texas area. The Central Texas EMC Society was recently awarded the 2009 Symposium and the society looks forward to putting on another great event. If you are interested in assisting with this event, please see the website for contact information.

Electron Devices Society [for more information]

Notice new meeting location!

**Topic or Presentation Title:**

**Speaker:**

**Date and Time:**

**Cost:**

**Reservations:**

**Meeting Location:** Room 3-D SEMATECH
2706 Montopolis Dr., Austin, TX 78741

**Directions:** [http://www.sematech.org/corporate/map.htm](http://www.sematech.org/corporate/map.htm)

Entry Directions: The visitor lobby is open until 6pm. Anyone arriving before 6 can go there to sign in. Park in the second parking lot on the right and enter near the flag pole, north side of building in the middle. After 6pm, everyone needs to enter through the east lobby. Park in the first parking lot on the right and enter through the door with the ATDF sign over it. **Refreshments:** 6pm - 6:30pm

Engineering in Medicine and Biology [for more information]

**Topic or Presentation Title:** Brain Activation by Transcranial Magnetic Stimulation (TMS)

**Speaker:** Dr Jack Lancaster, Research Imaging Center, UTHSCSA

**Date and Time:** Wed, Nov 9

**Cost:** $10 members/ $2 students/$15 non-members

**Reservations:** RSVP to Garrett Polhamus

**Meeting Location:** Loeffler Room, BSB 3.03.02, UTSA Campus

**Directions:** [http://www.utsa.edu/maps/1604/](http://www.utsa.edu/maps/1604/)

**Abstract:** TMS of the brain was first achieved by Barker et al. in 1985. A great advantage of TMS over electrical brain stimulation (EBS) is its non-invasiveness. TMS activates local neuronal populations by inducing transient E-fields in excess of 100V/m with a pulse duration of ~250 microseconds. Stimulator output and pulse repetition rate are adjustable, with safety concerns restricting pulse rates to less than 10 per second. A long-term goal is to use...
TMS in the treatment of depression, improving on EBS methods. Treatment efficacy appears to derive from the known ability of repetitive electrical stimulation to induce long-term potentiation and long-term depression of synapses and circuits. TMS produces both local and remote effects, i.e. activation of interconnected brain areas. TMS when combined with functional brain imaging reveals spatial and functional relations between networked brain areas, providing a promising new probe for human brain mapping.

We have an exciting Fall planned.
14 Dec: Dr John Clark, of Rice University, will be presenting.

For further information, please contact Dawn Roberson, 210-458-5520, robersondj@ieee.org.

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**Engineering Management**  
[for more information]

**Topic or Presentation Title:** Gaining Support for Your Projects  
**Speaker:** Tom Baker, VP Engineering, Overwatch, and Nancy Abraham, Manager of Overwatch's Program Management Office  
**Date and Time:** 5:45 pm Tuesday November 1  
**Cost:** $15 includes your choice of 7 dinner entrees, coffee or tea  
**Reservations:** RSVP to: lmartinich@ieee.org  
**Meeting Location:** El Gallo Restaurant, 2910 S. Congress, Austin

**Other Upcoming Engineering Management Events:**

No meeting in December.
In January, we'll begin our three-part series on **New Product Development: From Concept to Cash**. This series, offered in conjunction with PDMA and PMI, will provide you with both insights and the process for delivering new products.


For information regarding chapter activities (and those wanting to volunteer), contact Leslie Martinich ([leslie@competitivefocus.com](mailto:leslie@competitivefocus.com)) (512-423-5121).

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**Graduates of the Last Decade (GOLD)**

**Topic or Presentation Title:** IEEE GOLD Networking Event  
**Speaker:**  
**Date and Time:** November 11, 2005 from 6:00pm to 8:00pm  
**Cost:**  
**Reservations:** Kristi Hummel, khummel@ieee.org  
**Meeting Location:** Buffalo Billiards in Downtown Austin  
**Directions:** Congress Avenue and 6th Street (Southeast corner)

Come to Buffalo Billiards in downtown Austin on November 11th for an IEEE Graduates of the Last Decade (GOLD) Networking Event. This will be a great opportunity to meet other young engineering professionals in the Austin and San Antonio area. The event details are listed above. Please send an email to Kristi Hummel [khummel@ieee.org](mailto:khummel@ieee.org) if you plan to attend. We’ll see you then!

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**Laser and Electro Optics Society**
**Power Engineering Society**  [for more information]

**Topic or Presentation Title:** Internet over Power Lines  
**Speaker:** Dan Smith, Austin Energy  
**Date and Time:** Tuesday, November 15, 2005  (Note: 1 week early!)  
6:00pm Social  
6:30-7:00 Dinner  
7:00-7:30 Business Meeting  
7:30-8:30 Program  
**Cost:** Dinner is $10.00 – IEEE Members  
$12.00 – Non-IEEE Members  
Free for students.  
**Reservations:** RSVP to Stacy L Smith [stacy.smith@austin.utexas.edu] or go to our web site at [http://www.ewh.ieee.org/soc/pes/centraltexas/index.htm](http://www.ewh.ieee.org/soc/pes/centraltexas/index.htm).  
**Meeting Location:**  
El Gallo Mexican Restaurant  
2910 S Congress (see below)  
Austin, Texas  
512-444-2205  
**Directions:** From I-35:  
Exit at Oltorf, turn west, and continue until S. Congress Avenue. At S. Congress, turn left. El Gallo is about 500 feet past the next traffic light (Cumberland), on the right. It’s also directly across from the entrance to St. Edward’s University.  
From Ben White Blvd. (US290/SH71):  
Exit at S. Congress Avenue and turn north (left from 360, right from I-35). El Gallo is about 600 feet past the next traffic light (Woodward), on the left. It’s also directly across from the entrance to St. Edward’s University.  
**Upcoming Power Engineering Society topics:**  
December 6 – Ice Plant: Chilled water loop COA – Jim Collins, Austin Energy  
Location: Ice Plant, downtown Austin  
For further information, please contact Susan Thompton or Roy Matthews at 512-442-8085 ext 25

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**Product Safety Engineering Society**  [for more information]

**Topic or Presentation Title:**  
**Speaker:**  
**Date and Time:**  
**Cost:**  
**Reservations:**  
**Meeting Location:**  
**Directions:**  
We encourage you, others in your organization, or other interested parties to participate in our meetings every month. The PSES meets every month on the third Tuesday of every month at 6:30, with the program starting at 7pm, except in November/December. A combined monthly meeting is held in early
December to allow members and guests to enjoy the Thanksgiving and Christmas holidays. For further information about the PSES, please contact Dale Ritzen at (512) 651-5338.

Chapter Chair: Daniece Carpenter (daniece_carpenter@dell.com).

Women in Engineering  [for more information]

Joint Meeting Computer Society - San Antonio and Women in Engineering - San Antonio

**Topic or Presentation Title:** Computers in Fiction: Can we do the AI?

**Speaker:** Dr. Carol Luckhardt Redfield

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Women in Engineering has been an Affinity Group of the Central Texas Section since the Fall of 2002. Activities have been until now, Austin-based, with programs, events and membership primarily from the Austin area. We are delighted to announce that WIE is now expanding activities to the San Antonio area. Mercy Luhanga, Yu Zhang and Dawnlee Roberson are leading the effort to initiate WIE activities in San Antonio and are planning a first program in that area this November. We look forward to establishing a WIE membership base in San Antonio and evolving to two active groups.


**Editor's Notes**

The goal of this newsletter is to provide the more than 4700 members of the Section with up-to-date and meaningful information. We welcome contributions and suggestions that will improve the newsletter. Please contact the editor, Dawn Roberson at robersondj@ieee.org if you have any thoughts or suggestions. The deadline for submission is the 25th of the month.

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3. **IEEE Info**

**THE INSTITUTE:** can be found at [http://www.ieee.org/theinstitute](http://www.ieee.org/theinstitute)

IEEE Member Benefit:
IEEE Members access the world of technology. Search more than 1,100,000 documents in IEEE Xplore. Subscribe to IEEE Society publications at low, member-only rates. Purchase papers online for just $13 each -- or save even more when you subscribe to the IEEE Member Digital Library.

Get the most from your IEEE membership -- find out how today: http://boldfish.ieee.org/u/market8+/04196044


Database Offers Examples of Pre-University Education Activities

A new section of the IEEE Web site has been developed to help IEEE members and volunteers identify various activities being conducted in IEEE sections related to pre-university science, engineering and technology education. Created by IEEE Educational Activities with support from the IEEE Foundation, the IEEE Pre-university Activity Network consists of two parts:
*a public area that details current and upcoming activities worldwide
*a password-protected database for IEEE members and volunteers to submit their own experiences, ideas and best practices for display on the site
There are currently about 70 examples of IEEE pre-university activities included in the database. To access the IEEE Pre-university Network, visit http://www.ieee.org/eab/preudatabase. For more information, contact Doug Gorham, IEEE Educational Activities; telephone +1 732 562 5483; “d.g.gorham@ieee.org” or Allison Ickowicz, IEEE Educational Activities; telephone +1 732 562 5496; “a.m.ickowicz@ieee.org”.

Nomination Deadline Nears for EE Times ACE Awards

EE Times is looking for a few great people, companies, and products for its Second Annual ACE Awards. The awards, cosponsored by IEEE Spectrum, honor the people, the companies, and the products that demonstrate leadership and make positive contributions to society. The deadline for entries is 31 October 2005. To complete a nomination or for more details go to http://boldfish.ieee.org:80/u/1061/00757617

IEEE membership portal

We hope all Section members are taking advantage of the new IEEE Membership Portal. The IEEE History Center is supplying interesting content which will be featured on the main page. Visit it at http://www.ieee.org/myieee.